

ACI MATERIALS JOURNAL

INDEX VOLUME 107, 2010

From a Journal of the American Concrete Institute, January through December 2010



American Concrete Institute®
Advancing concrete knowledge

AMERICAN CONCRETE INSTITUTE, Farmington Hills, Michigan

Remove this section and include it with your January through December 2010 Volume 107 issues of the *ACI Materials Journal*.

A

- Accelerated hydration** Potential Approach to Evaluating Soundness of Concrete Containing MgO-Based Expansive Agent (107-M13) Mo, L.; Deng, M.; and Tang, M., Mar.-Apr. 2010 99
- Accelerated test** Design and Research on Gradient Structure Concrete Based on Volumetric Stabilization (107-M69) Wen, X.-D.; Ma, B.-G.; Gan, W.-Z.; and Xian, Z.-W., Nov.-Dec. 2010 611
- Accelerometer** Compacted Sand Concrete in Pavement Construction: An Economical and Environmental Solution (107-M24) El Euch Khay, S.; Neji, J.; and Loulizi, A., Mar.-Apr. 2010 195
- Active protection** Corrosion Protection of Fiber-Reinforced Polymer-Wrapped Reinforced Concrete (107-M40) Gadve, S.; Mukherjee, A.; and Malhotra, S. N., July-Aug. 2010 349
- Admixtures(s)**
- Effect of Calcium Chloride and Initial Curing Temperature on Expansion Caused by Sulfate Exposure (107-M72) Kosbab, B. D., and Kurtis, K. E., Nov.-Dec. 2010 632
 - Effects of Hauling Time on Air-Entrained Self-Consolidating Concrete (107-M32) Ghafoori, N., and Barfield, M., May-June 2010 275
- Aggelis, D. G.**
- Characterization of Deep Surface-Opening Cracks in Concrete: Feasibility of Impact-Generated Rayleigh-Waves (107-M36) May-June 2010 305
 - Numerical Simulation of Stress Waves on Surface of Strongly Heterogeneous Media (107-M53) Sept.-Oct. 2010 469
- Aggregate(s)**
- Artificial Neural Network Modeling of Early-Age Dynamic Young's Modulus of Normal Concrete (107-M33) Venkateela, G.; Gregori, A.; Sun, Z.; and Shah, S. P., May-June 2010 282
 - Effect of Aggregate Type on Mechanical Properties of Reactive Powder Concrete (107-M50) Aydin, S.; Yazici, H.; Yardimci, M. Y.; and Yigiter, H., Sept.-Oct. 2010 441
 - Effect of Curing Methods on Autogenous Shrinkage and Self-Induced Stress of High-Performance Concrete (107-M10) Meddah, M. S., and Sato, R., Jan.-Feb. 2010 65
- Aggregate gradation** Effect of Aggregate Size and Gradation on Pervious Concrete Mixtures (107-M71) Neptune, A. I., and Putman, B. J., Nov.-Dec. 2010 625
- Air entrainment** Effects of Hauling Time on Air-Entrained Self-Consolidating Concrete (107-M32) Ghafoori, N., and Barfield, M., May-June 2010 275
- Air void** Effects of Hauling Time on Air-Entrained Self-Consolidating Concrete (107-M32) Ghafoori, N., and Barfield, M., May-June 2010 275
- Akalin, O.** Self-Consolidating High-Strength Concrete Optimization by Mixture Design Method (107-M41) July-Aug. 2010 357
- Akay, K. U.** Self-Consolidating High-Strength Concrete Optimization by Mixture Design Method (107-M41) July-Aug. 2010 357
- Alaejos, P.** Models for Chloride Diffusion Coefficients of Concretes in Tidal Zone (107-M01) Jan.-Feb. 2010 3
- Alexander, M. G.** Suitability of Various Measurement Techniques for Assessing Corrosion in Cracked Concrete (107-M55) Sept.-Oct. 2010 481
- Al Jadiri, R. S.** New Method for Proportioning Self-Consolidating Concrete Based on Compressive Strength Requirements (107-M56) Sept.-Oct. 2010 490
- Alkali-aggregate reaction** Investigation of Alkali-Silica Reaction Inhibited by New Lithium Compound (107-M06) Mo, X.; Zhang, Y.; Yu, C.; Deng, M.; Tang, M.; Hüniger, K.-J.; and Fournier, B., Jan.-Feb. 2010 37

Alkali-silica reaction

- Correlation of Reaction Products and Expansion Potential in Alkali-Silica Reaction for Blended Cement Materials (107-M44) Bonakdar, A.; Mobasher, B.; Dey, S. K.; and Roy, D. M., July-Aug. 2010 380
 - Investigation of Alkali-Silica Reaction Inhibited by New Lithium Compound (107-M06) Mo, X.; Zhang, Y.; Yu, C.; Deng, M.; Tang, M.; Hüniger, K.-J.; and Fournier, B., Jan.-Feb. 2010 37
- Alternative cementitious material** Synergistic Effect between Glass Frit and Blast-Furnace Slag (107-M11) Laldji, S.; Phithaksounthone, A.; and Tagnit-Hamou, A., Jan.-Feb. 2010 75
- Aluminosilicate** Effect of Mixture Compositions on Workability and Strength of Fly Ash-Based Inorganic Polymer Mortar (107-M62) Wu, H.-C., and Sun, P., Nov.-Dec. 2010 554
- Amplitude factor** Characterization of Deep Surface-Opening Cracks in Concrete: Feasibility of Impact-Generated Rayleigh-Waves (107-M36) Chai, H. K.; Momoki, S.; Aggelis, D. G.; and Shiotani, T., May-June 2010 305
- Analysis of Mortar Long-Term Strength with Supplementary Cementitious Materials Cured at Different Temperatures** (107-M37) Eziane, K.; Kadri, E.-H.; Bougara, A.; and Bennacer, R., July-Aug. 2010 323
- Anderson, M. A.** Detection of Aggregate Clay Coatings and Impacts on Concrete (107-M45) July-Aug. 2010 387
- Andión, L. G.** Triple Percolation in Concrete Reinforced with Carbon Fiber (107-M46) July-Aug. 2010 396
- Ann, K. Y.**
- Critical Corrosion Threshold of Galvanized Reinforcing Bars (Disc. 106-M22) Jan.-Feb. 2010 85
 - Influence of Chemistry of Chloride Ions in Cement Matrix on Corrosion of Steel (107-M38) July-Aug. 2010 332
- Anodic current** Corrosion Protection of Fiber-Reinforced Polymer-Wrapped Reinforced Concrete (107-M40) Gadve, S.; Mukherjee, A.; and Malhotra, S. N., July-Aug. 2010 349
- Artificial Neural Network Modeling of Early-Age Dynamic Young's Modulus of Normal Concrete** (107-M33) Venkateela, G.; Gregori, A.; Sun, Z.; and Shah, S. P., May-June 2010 282
- Asphalt emulsion** Temperature Stability of Compressive Strength of Cement Asphalt Mortar (107-M04) Wang, F.; Liu, Z.; Wang, T.; and Hu, S., Jan.-Feb. 2010 27
- Assessing Mechanical Properties and Microstructure of Fire-Damaged Engineered Cementitious Composites** (107-M35) Sahmaran, M.; Lachemi, M.; and Li, V. C., May-June 2010 297
- Attenuation**
- Characterization of Deep Surface-Opening Cracks in Concrete: Feasibility of Impact-Generated Rayleigh-Waves (107-M36) Chai, H. K.; Momoki, S.; Aggelis, D. G.; and Shiotani, T., May-June 2010 305
 - Wavelet Analysis of Ultrasonic Pulses in Cement-Based Materials (107-M29) Nogueira, C. L., May-June 2010 248
- Autoclave** Effect of Aggregate Type on Mechanical Properties of Reactive Powder Concrete (107-M50) Aydin, S.; Yazici, H.; Yardimci, M. Y.; and Yigiter, H., Sept.-Oct. 2010 441
- Autogenous shrinkage** Shrinkage of Precast, Prestressed Self-Consolidating Concrete (107-M27) Khayat, K. H., and Long, W. J., May-June 2010 231
- Aydin, S.** Effect of Aggregate Type on Mechanical Properties of Reactive Powder Concrete (107-M50) Sept.-Oct. 2010 441

B

- Baeza, F. J.** Triple Percolation in Concrete Reinforced with Carbon Fiber (107-M46) July-Aug. 2010 396
- Barfield, M.** Effects of Hauling Time on Air-Entrained Self-Consolidating Concrete (107-M32) May-June 2010 275
- Basu, P. C.**
- New Methodology to Proportion Self-Consolidating Concrete with High-Volume Fly Ash (107-M26) May-June 2010 222

—Strength-Cementitious Material-Water Relationship for Proportioning of Fly Ash-Based Concrete (107-M39) July-Aug. 2010	340
Belaïd, K. Performance of Cast-in-Place Self-Consolidating Concrete Made with Various Types of Viscosity-Enhancing Admixtures (107-M47) July-Aug. 2010	403
Bennacer, R. Analysis of Mortar Long-Term Strength with Supplementary Cementitious Materials Cured at Different Temperatures (107-M37) July-Aug. 2010	323
Bentz, D. P.	
—Planar Image-Based Reconstruction of Pervious Concrete Pore Structure and Permeability Prediction (107-M48) July-Aug. 2010	413
—Powder Additions to Mitigate Retardation in High-Volume Fly Ash Mixtures (107-M58) Sept.-Oct. 2010	508
Bermúdez, M. A. Models for Chloride Diffusion Coefficients of Concretes in Tidal Zone (107-M01) Jan.-Feb. 2010	3
Bernard, E. S. Influence of Fiber Type on Creep Deformation of Cracked Fiber-Reinforced Shotcrete Panels (107-M54) Sept.-Oct. 2010	474
Beushausen, H. D. Suitability of Various Measurement Techniques for Assessing Corrosion in Cracked Concrete (107-M55) Sept.-Oct. 2010	481
Bhattacharjee, B. Effect of Age and Water-Cement Ratio on Size and Dispersion of Pores in Ordinary Portland Cement Paste (107-M19) Mar.-Apr. 2010	147
Bhethanabotla, V. R. Measurement of Oxygen Permeability of Epoxy Polymers (107-M18) Mar.-Apr. 2010	138
Bidirectional Multiple Cracking Tests on High-Performance Fiber-Reinforced Cementitious Composite Plates (107-M51) Suryanto, B.; Nagai, K.; and Maekawa, K., Sept.-Oct. 2010	450
Bilir, T.	
—Effect of Bottom Ash as Fine Aggregate on Shrinkage Cracking of Mortars (107-M08) Jan.-Feb. 2010	48
—Effect of Non-Ground-Granulated Blast-Furnace Slag as Fine Aggregate on Shrinkage Cracking of Mortars (107-M61) Nov.-Dec. 2010	545
Blunt, J. Electrical Resistance Tomography for Assessment of Cracks in Concrete (107-M60) Sept.-Oct. 2010	523
Bonakdar, A. Correlation of Reaction Products and Expansion Potential in Alkali-Silica Reaction for Blended Cement Materials (107-M44) July-Aug. 2010	380
Bond	
—Comparison of Methods for Texture Assessment of Concrete Surfaces (107-M49) Santos, P. M. D., and Santos Júlio, E. N. B., Sept.-Oct. 2010	433
—Effect of Filtering on Texture Assessment of Concrete Surfaces (107-M05) Duarte Santos, P. M., and Santos Júlio, E. N. B., Jan.-Feb. 2010	31
Bond strength	
—Interface Tailoring of Polyester-Type Fiber in Engineered Cementitious Composite Matrix against Pullout (107-M15) Rathod, J. D., and Patodi, S. C., Mar.-Apr. 2010	114
—Polyvinyl Alcohol Fiber-Reinforced Mortars for Masonry Applications (107-M09) Skourup, B. N., and Erdogmus, E., Jan.-Feb. 2010	57
Bottom ash Effect of Bottom Ash as Fine Aggregate on Shrinkage Cracking of Mortars (107-M08) Topçu, I. B., and Bilir, T., Jan.-Feb. 2010	48
Bougara, A. Analysis of Mortar Long-Term Strength with Supplementary Cementitious Materials Cured at Different Temperatures (107-M37) July-Aug. 2010	323
Bridging oxygens Correlation of Reaction Products and Expansion Potential in Alkali-Silica Reaction for Blended Cement Materials (107-M44) Bonakdar, A.; Mobasher, B.; Dey, S. K.; and Roy, D. M., July-Aug. 2010	380
Brooks, Z. Instantaneous In-Situ Determination of Water-Cement Ratio of Fresh Concrete (107-M66) Nov.-Dec. 2010	586
Brucite Expansion of MgO in Cement Pastes Measured by Different Methods (107-M12) Nokken, M. R., Jan.-Feb. 2010	80
Buffering Influence of Chemistry of Chloride Ions in Cement Matrix on Corrosion of Steel (107-M38) Song, H.-W.; Jung, M.-S.; Lee, C.-H.; Kim, S.-H.; and Ann, K. Y., July-Aug. 2010	332
Building technology Powder Additions to Mitigate Retardation in High-Volume Fly Ash Mixtures (107-M58) Bentz, D. P., Sept.-Oct. 2010	508

C

Calcium chloride Effect of Calcium Chloride and Initial Curing Temperature on Expansion Caused by Sulfate Exposure (107-M72) Kosbab, B. D., and Kurtis, K. E., Nov.-Dec. 2010	632
Calcium hydroxide content Calcium Hydroxide Formation in Thin Cement Paste Exposed to Air (107-M42) Haselbach, L. M., and Liu, L., July-Aug. 2010	365
Calcium Hydroxide Formation in Thin Cement Paste Exposed to Air (107-M42) Haselbach, L. M., and Liu, L., July-Aug. 2010	365
Carbon Carbon-Fiber Cement-Based Materials for Electromagnetic Shielding (107-M68) Muthusamy, S., and Chung, D. D. L., Nov.-Dec. 2010	602
Carbon fiber Triple Percolation in Concrete Reinforced with Carbon Fiber (107-M46) Baeza, F. J.; Chung, D. D. L.; Zornoza, E.; Andión, L. G.; and Garcés, P., July-Aug. 2010	396
Carbon-Fiber Cement-Based Materials for Electromagnetic Shielding (107-M68) Muthusamy, S., and Chung, D. D. L., Nov.-Dec. 2010	602
Carse, A. H. Performance of Permeability-Reducing Admixtures in Marine Concrete Structures (107-M34) May-June 2010	291
Cathodic protection Conductive Concrete for Cathodic Protection of Bridge Decks (107-M65) Yehia, S., and Host, J., Nov.-Dec. 2010	577
Cation exchange capacity Detection of Aggregate Clay Coatings and Impacts on Concrete (107-M45) Muñoz, J. F.; Tejedor, M. I.; Anderson, M. A.; and Cramer, S. M., July-Aug. 2010	387
Cement asphalt mortar Temperature Stability of Compressive Strength of Cement Asphalt Mortar (107-M04) Wang, F.; Liu, Z.; Wang, T.; and Hu, S., Jan.-Feb. 2010	27
Cement-based materials Wavelet Analysis of Ultrasonic Pulses in Cement-Based Materials (107-M29) Nogueira, C. L., May-June 2010	248
Cement paste	
—Effect of Age and Water-Cement Ratio on Size and Dispersion of Pores in Ordinary Portland Cement Paste (107-M19) Kondraivendhan, B., and Bhattacharjee, B., Mar.-Apr. 2010	147
—Investigation into Yield Behavior of Fresh Cement Paste: Model and Experiment (107-M02) Lu, G., and Wang, K., Jan.-Feb. 2010	12
Cetrangolo, G. P. Inspection of Concrete Using Air-Coupled Ultrasonic Pulse Velocity (107-M20) Mar.-Apr. 2010	155
Chai, H. K. Characterization of Deep Surface-Opening Cracks in Concrete: Feasibility of Impact-Generated Rayleigh-Waves (107-M36) May-June 2010	305
Chandra, L. R. Early-Age Shrinkage Strains Versus Depth of Low Water-Cement Ratio Mortar Prisms (107-M25) May-June 2010	213
Characterization of Deep Surface-Opening Cracks in Concrete: Feasibility of Impact-Generated Rayleigh-Waves (107-M36) Chai, H. K.; Momoki, S.; Aggelis, D. G.; and Shiotani, T., May-June 2010	305
Chemical composition Correlation of Reaction Products and Expansion Potential in Alkali-Silica Reaction for Blended Cement Materials (107-M44) Bonakdar, A.; Mobasher, B.; Dey, S. K.; and Roy, D. M., July-Aug. 2010	380
Chloride Influence of Chemistry of Chloride Ions in Cement Matrix on Corrosion of Steel (107-M38) Song, H.-W.; Jung, M.-S.; Lee, C.-H.; Kim, S.-H.; and Ann, K. Y., July-Aug. 2010	332
Chloride attack Corrosion Process of Steel Bar in Concrete in Full Lifetime (107-M63) Yuan, Y.; Jiang, J.; and Peng, T., Nov.-Dec. 2010	562
Chloride-induced corrosion	
—Performance of Permeability-Reducing Admixtures in Marine Concrete Structures (107-M34) Dao, V. T. N.; Dux, P. F.; Morris, P. H.; and Carse, A. H., May-June 2010	291
—Suitability of Various Measurement Techniques for Assessing Corrosion in Cracked Concrete (107-M55) Otieno, M. B.; Alexander, M. G.; and Beushausen, H. D., Sept.-Oct. 2010	481
Chloride ingress	
—Models for Chloride Diffusion Coefficients of Concretes in Tidal Zone (107-M01) Bermúdez, M. A., and Alaejos, P., Jan.-Feb. 2010	3
—Time Evolution of Chloride Penetration in Blended Cement Concrete (107-M67) Villagrán-Zaccardi, Y. A.; Taus, V. L.; and Di Maio, Á. A., Nov.-Dec. 2010	593

Choi, S. C.

- New Viscoelastic Model for Early-Age Concrete Based on Measured Strains and Stresses (107-M28) May-June 2010 239
- Thermal Strain and Drying Shrinkage of Concrete Structures in the Field (107-M57) Sept.-Oct. 2010 498

Chowdhury, S.

- Measurement of Oxygen Permeability of Epoxy Polymers (107-M18) Mar.-Apr. 2010 138
- New Methodology to Proportion Self-Consolidating Concrete with High-Volume Fly Ash (107-M26) May-June 2010 222
- Strength-Cementitious Material-Water Relationship for Proportioning of Fly Ash-Based Concrete (107-M39) July-Aug. 2010 340

Chung, D. D. L.

- Carbon-Fiber Cement-Based Materials for Electromagnetic Shielding (107-M68) Nov.-Dec. 2010 602
- Triple Percolation in Concrete Reinforced with Carbon Fiber (107-M46) July-Aug. 2010 396

- Chung, W. Y.-M.** Creep Behavior of High-Strength Concrete with Polypropylene Fibers at Elevated Temperatures (107-M22) Mar.-Apr. 2010 176

- Clays** Detection of Aggregate Clay Coatings and Impacts on Concrete (107-M45) Muñoz, J. F.; Tejedor, M. I.; Anderson, M. A.; and Cramer, S. M., July-Aug. 2010 387

- Coarse aggregate** Detection of Aggregate Clay Coatings and Impacts on Concrete (107-M45) Muñoz, J. F.; Tejedor, M. I.; Anderson, M. A.; and Cramer, S. M., July-Aug. 2010 387

- Coastal environment** Performance of Permeability-Reducing Admixtures in Marine Concrete Structures (107-M34) Dao, V. T. N.; Dux, P. F.; Morris, P. H.; and Carse, A. H., May-June 2010 291

- Coatings** Detection of Aggregate Clay Coatings and Impacts on Concrete (107-M45) Muñoz, J. F.; Tejedor, M. I.; Anderson, M. A.; and Cramer, S. M., July-Aug. 2010 387

- Compacted Sand Concrete in Pavement Construction: An Economical and Environmental Solution** (107-M24) El Euch Khay, S.; Neji, J.; and Loulizi, A., Mar.-Apr. 2010 195

- Comparison of Methods for Texture Assessment of Concrete Surfaces** (107-M49) Santos, P. M. D., and Santos Júlio, E. N. B., Sept.-Oct. 2010 433

- Compliance function** New Viscoelastic Model for Early-Age Concrete Based on Measured Strains and Stresses (107-M28) Choi, S. C., and Oh, B. H., May-June 2010 239

Compressive strength

- Analysis of Mortar Long-Term Strength with Supplementary Cementitious Materials Cured at Different Temperatures (107-M37) Ezziane, K.; Kadri, E.-H.; Bougara, A.; and Bennacer, R., July-Aug. 2010 323
- Assessing Mechanical Properties and Microstructure of Fire-Damaged Engineered Cementitious Composites (107-M35) Sahmaran, M.; Lachemi, M.; and Li, V. C., May-June 2010 297

- Compacted Sand Concrete in Pavement Construction: An Economical and Environmental Solution (107-M24) El Euch Khay, S.; Neji, J.; and Loulizi, A., Mar.-Apr. 2010 195

- Compressive Strength Relationships for Concrete under Elevated Temperatures (107-M21) Knaack, A. M.; Kurama, Y. C.; and Kirkner, D. J., Mar.-Apr. 2010 164

- Polyvinyl Alcohol Fiber-Reinforced Mortars for Masonry Applications (107-M09) Skourup, B. N., and Erdogmus, E., Jan.-Feb. 2010 57
- Precision of Compressive Strength Testing of Concrete with Different Cylinder Specimen Sizes (107-M52) Taghaddos, H.; Soleymani, H. R.; and Robson, J. D., Sept.-Oct. 2010 461

- Size and Wall Effects on Compressive Strength of Concretes (107-M43) Turkel, A., and Ozkul, M. H., July-Aug. 2010 372
- Temperature Stability of Compressive Strength of Cement Asphalt Mortar (107-M04) Wang, F.; Liu, Z.; Wang, T.; and Hu, S., Jan.-Feb. 2010 27

- Compressive Strength Relationships for Concrete under Elevated Temperatures** (107-M21) Knaack, A. M.; Kurama, Y. C.; and Kirkner, D. J., Mar.-Apr. 2010 164

- Concrete cores** Size and Wall Effects on Compressive Strength of Concretes (107-M43) Turkel, A., and Ozkul, M. H., July-Aug. 2010 372

- Concrete mixture proportioning** Self-Consolidating High-Strength Concrete Optimization by Mixture Design Method (107-M41) Akalin, O.; Akay, K. U.; and Sennaroglu, B., July-Aug. 2010 357

- Conductive concrete** Conductive Concrete for Cathodic Protection of Bridge Decks (107-M65) Yehia, S., and Host, J., Nov.-Dec. 2010 577

- Conductive Concrete for Cathodic Protection of Bridge Decks** (107-M65) Yehia, S., and Host, J., Nov.-Dec. 2010 577

- Correlation of Reaction Products and Expansion Potential in Alkali-Silica Reaction for Blended Cement Materials** (107-M44) Bonakdar, A.; Mobasher, B.; Dey, S. K.; and Roy, D. M., July-Aug. 2010 380

Corrosion

- Conductive Concrete for Cathodic Protection of Bridge Decks (107-M65) Yehia, S., and Host, J., Nov.-Dec. 2010 577

- Corrosion Protection of Fiber-Reinforced Polymer-Wrapped Reinforced Concrete (107-M40) Gadve, S.; Mukherjee, A.; and Malhotra, S. N., July-Aug. 2010 349

- Influence of Chemistry of Chloride Ions in Cement Matrix on Corrosion of Steel (107-M38) Song, H.-W.; Jung, M.-S.; Lee, C.-H.; Kim, S.-H.; and Ann, K. Y., July-Aug. 2010 332

- Measurement of Oxygen Permeability of Epoxy Polymers (107-M18) Khoe, C.; Chowdhury, S.; Bhethanabotla, V. R.; and Sen, R., Mar.-Apr. 2010 138

- Modeling Mechanical Behavior of Reinforced Concrete due to Corrosion of Steel Bar (107-M14) Kim, K. H.; Jang, S. Y.; Jang, B. S.; and Oh, B. H., Mar.-Apr. 2010 106

- Corrosion assessment** Suitability of Various Measurement Techniques for Assessing Corrosion in Cracked Concrete (107-M55) Otieno, M. B.; Alexander, M. G.; and Beushausen, H. D., Sept.-Oct. 2010 481

- Corrosion Process of Steel Bar in Concrete in Full Lifetime** (107-M63) Yuan, Y.; Jiang, J.; and Peng, T., Nov.-Dec. 2010 562

- Corrosion Protection of Fiber-Reinforced Polymer-Wrapped Reinforced Concrete** (107-M40) Gadve, S.; Mukherjee, A.; and Malhotra, S. N., July-Aug. 2010 349

- Corrosion rate** Corrosion Process of Steel Bar in Concrete in Full Lifetime (107-M63) Yuan, Y.; Jiang, J.; and Peng, T., Nov.-Dec. 2010 562

- Crack detection** Electrical Resistance Tomography for Assessment of Cracks in Concrete (107-M60) Karhunen, K.; Seppänen, A.; Lehtikoinen, A.; Blunt, J.; Kaipio, J. P.; and Monteiro, P. J. M., Sept.-Oct. 2010 523

- Cracked concrete** Suitability of Various Measurement Techniques for Assessing Corrosion in Cracked Concrete (107-M55) Otieno, M. B.; Alexander, M. G.; and Beushausen, H. D., Sept.-Oct. 2010 481

Cracking

- Effect of Bottom Ash as Fine Aggregate on Shrinkage Cracking of Mortars (107-M08) Topcu, I. B., and Bilir, T., Jan.-Feb. 2010 48

- Effect of Non-Ground-Granulated Blast-Furnace Slag as Fine Aggregate on Shrinkage Cracking of Mortars (107-M61) Topcu, I. B., and Bilir, T., Nov.-Dec. 2010 545

- Modeling Mechanical Behavior of Reinforced Concrete due to Corrosion of Steel Bar (107-M14) Kim, K. H.; Jang, S. Y.; Jang, B. S.; and Oh, B. H., Mar.-Apr. 2010 106

- Cramer, S. M.** Detection of Aggregate Clay Coatings and Impacts on Concrete (107-M45) July-Aug. 2010 387

Creep

- Creep Behavior of High-Strength Concrete with Polypropylene Fibers at Elevated Temperatures (107-M22) Wu, B.; Lam, E. S.-S.; Liu, Q.; Chung, W. Y.-M.; and Ho, I. F.-Y., Mar.-Apr. 2010 176

- Influence of Fiber Type on Creep Deformation of Cracked Fiber-Reinforced Shotcrete Panels (107-M54) Bernard, E. S., Sept.-Oct. 2010 474

- Creep Behavior of High-Strength Concrete with Polypropylene Fibers at Elevated Temperatures** (107-M22) Wu, B.; Lam, E. S.-S.; Liu, Q.; Chung, W. Y.-M.; and Ho, I. F.-Y., Mar.-Apr. 2010 176

- Critical Corrosion Threshold of Galvanized Reinforcing Bars** (106-M22) Darwin, D.; Browning, J.; O'Reilly, M.; Xing, L.; and Ji, J., Mar.-Apr. 2009 176

- Disc. by Ann, K. Y., Jan.-Feb. 2010 85
- Crystalline swelling** Detection of Aggregate Clay Coatings and Impacts on Concrete (107-M45) Muñoz, J. F.; Tejedor, M. I.; Anderson, M. A.; and Cramer, S. M., July-Aug. 2010 387

Curing

- Effect of Calcium Chloride and Initial Curing Temperature on Expansion Caused by Sulfate Exposure (107-M72) Kosbab, B. D., and Kurtis, K. E., Nov.-Dec. 2010 632

- Effect of Curing Methods on Autogenous Shrinkage and Self-Induced Stress of High-Performance Concrete (107-M10) Meddah, M. S., and Sato, R., Jan.-Feb. 2010. 65
- Cutting damage** Size and Wall Effects on Compressive Strength of Concretes (107-M43) Turkel, A., and Ozkul, M. H., July-Aug. 2010. 372
- Cylinders** Precision of Compressive Strength Testing of Concrete with Different Cylinder Specimen Sizes (107-M52) Taghaddos, H.; Soleymani, H. R.; and Robson, J. D., Sept.-Oct. 2010. 461

D

- Damage assessment** Numerical Simulation of Stress Waves on Surface of Strongly Heterogeneous Media (107-M53) Aggelis, D. G., Sept.-Oct. 2010. 469
- Dao, V. T. N.** Performance of Permeability-Reducing Admixtures in Marine Concrete Structures (107-M34) May-June 2010. 291
- Deng, M.**
- Investigation of Alkali-Silica Reaction Inhibited by New Lithium Compound (107-M06) Jan.-Feb. 2010. 37
- Potential Approach to Evaluating Soundness of Concrete Containing MgO-Based Expansive Agent (107-M13) Mar.-Apr. 2010. 99
- Design**
- Compressive Strength Relationships for Concrete under Elevated Temperatures (107-M21) Knaack, A. M.; Kurama, Y. C.; and Kirkner, D. J., Mar.-Apr. 2010. 164
- Design and Research on Gradient Structure Concrete Based on Volumetric Stabilization (107-M69) Wen, X.-D.; Ma, B.-G.; Gan, W.-Z.; and Xian, Z.-W., Nov.-Dec. 2010. 611
- Design and Research on Gradient Structure Concrete Based on Volumetric Stabilization** (107-M69) Wen, X.-D.; Ma, B.-G.; Gan, W.-Z.; and Xian, Z.-W., Nov.-Dec. 2010. 611
- Detection of Aggregate Clay Coatings and Impacts on Concrete** (107-M45) Muñoz, J. F.; Tejedor, M. I.; Anderson, M. A.; and Cramer, S. M., July-Aug. 2010. 387
- Deterioration** Salt Weathering of Concrete by Sodium Carbonate and Sodium Chloride (107-M30) Haynes, H.; O'Neill, R.; Neff, M.; and Mehta, P. K., May-June 2010. 258
- Dey, S. K.** Correlation of Reaction Products and Expansion Potential in Alkali-Silica Reaction for Blended Cement Materials (107-M44) July-Aug. 2010. 380
- Diffusion** Measurement of Oxygen Permeability of Epoxy Polymers (107-M18) Khoe, C.; Chowdhury, S.; Bhethanabotla, V. R.; and Sen, R., Mar.-Apr. 2010. 138
- Di Maio, Á. A.** Time Evolution of Chloride Penetration in Blended Cement Concrete (107-M67) Nov.-Dec. 2010. 593
- Direct tension test** Ultra-High-Strength, Glass Fiber-Reinforced Concrete: Mechanical Behavior and Numerical Modeling (107-M23) Roth, M. J.; Eamon, C. D.; Slawson, T. R.; Tonyan, T. D.; and Dubey, A., Mar.-Apr. 2010. 185
- Dispersion** Effect of Age and Water-Cement Ratio on Size and Dispersion of Pores in Ordinary Portland Cement Paste (107-M19) Kondraivendhan, B., and Bhattacharjee, B., Mar.-Apr. 2010. 147
- Drilling damage** Size and Wall Effects on Compressive Strength of Concretes (107-M43) Turkel, A., and Ozkul, M. H., July-Aug. 2010. 372
- Drying shrinkage**
- Shrinkage of Precast, Prestressed Self-Consolidating Concrete (107-M27) Khayat, K. H., and Long, W. J., May-June 2010. 231
- Thermal Strain and Drying Shrinkage of Concrete Structures in the Field (107-M57) Choi, S., and Won, M. C., Sept.-Oct. 2010. 498
- Duarte Santos, P. M.** Effect of Filtering on Texture Assessment of Concrete Surfaces (107-M05) Jan.-Feb. 2010. 31
- Dubey, A.** Ultra-High-Strength, Glass Fiber-Reinforced Concrete: Mechanical Behavior and Numerical Modeling (107-M23) Mar.-Apr. 2010. 185
- Ductility** Experimental Study on Mechanical Properties of Concrete Confined with Plastic Pipe (107-M17) Wang, J., and Yang, Q., Mar.-Apr. 2010. 132
- Durability**
- Instantaneous In-Situ Determination of Water-Cement Ratio of Fresh Concrete (107-M66) Mancio, M.; Moore, J. R.; Brooks, Z.; Monteiro, P. J. M.; and Glaser, S. D., Nov.-Dec. 2010. 586

- Modeling Mechanical Behavior of Reinforced Concrete due to Corrosion of Steel Bar (107-M14) Kim, K. H.; Jang, S. Y.; Jang, B. S.; and Oh, B. H., Mar.-Apr. 2010. 106
- Models for Chloride Diffusion Coefficients of Concretes in Tidal Zone (107-M01) Bermúdez, M. A., and Alaejos, P., Jan.-Feb. 2010. 3
- Performance of Permeability-Reducing Admixtures in Marine Concrete Structures (107-M34) Dao, V. T. N.; Dux, P. F.; Morris, P. H.; and Carse, A. H., May-June 2010. 291
- Salt Weathering of Concrete by Sodium Carbonate and Sodium Chloride (107-M30) Haynes, H.; O'Neill, R.; Neff, M.; and Mehta, P. K., May-June 2010. 258
- Dux, P. F.** Performance of Permeability-Reducing Admixtures in Marine Concrete Structures (107-M34) May-June 2010. 291

E

- Eamon, C. D.** Ultra-High-Strength, Glass Fiber-Reinforced Concrete: Mechanical Behavior and Numerical Modeling (107-M23) Mar.-Apr. 2010. 185
- Early age** Early-Age Shrinkage Strains Versus Depth of Low Water-Cement Ratio Mortar Prisms (107-M25) Ong, K. C. G.; Chandra, L. R.; and Myint-Lay, K., May-June 2010. 213
- Early-age autogenous shrinkage** Effect of Curing Methods on Autogenous Shrinkage and Self-Induced Stress of High-Performance Concrete (107-M10) Meddah, M. S., and Sato, R., Jan.-Feb. 2010. 65
- Early-age concrete**
- Artificial Neural Network Modeling of Early-Age Dynamic Young's Modulus of Normal Concrete (107-M33) Venkateela, G.; Gregori, A.; Sun, Z.; and Shah, S. P., May-June 2010. 282
- New Viscoelastic Model for Early-Age Concrete Based on Measured Strains and Stresses (107-M28) Choi, S. C., and Oh, B. H., May-June 2010. 239
- Early-Age Shrinkage Strains Versus Depth of Low Water-Cement Ratio Mortar Prisms** (107-M25) Ong, K. C. G.; Chandra, L. R.; and Myint-Lay, K., May-June 2010. 213
- Effect of Age and Water-Cement Ratio on Size and Dispersion of Pores in Ordinary Portland Cement Paste** (107-M19) Kondraivendhan, B., and Bhattacharjee, B., Mar.-Apr. 2010. 147
- Effect of Aggregate Size and Gradation on Pervious Concrete Mixtures** (107-M71) Neptune, A. I., and Putman, B. J., Nov.-Dec. 2010. 625
- Effect of Aggregate Type on Mechanical Properties of Reactive Powder Concrete** (107-M50) Aydin, S.; Yazici, H.; Yardimci, M. Y.; and Yigiter, H., Sept.-Oct. 2010. 441
- Effect of Bottom Ash as Fine Aggregate on Shrinkage Cracking of Mortars** (107-M08) Topcu, I. B., and Bilir, T., Jan.-Feb. 2010. 48
- Effect of Calcium Chloride and Initial Curing Temperature on Expansion Caused by Sulfate Exposure** (107-M72) Kosbab, B. D., and Kurtis, K. E., Nov.-Dec. 2010. 632
- Effect of Curing Methods on Autogenous Shrinkage and Self-Induced Stress of High-Performance Concrete** (107-M10) Meddah, M. S., and Sato, R., Jan.-Feb. 2010. 65
- Effect of Different Dosages of Polypropylene Fibers in Thin Whitetopping Concrete Pavements** (107-M07) Rodezno, M. C., and Kaloush, K. E., Jan.-Feb. 2010. 42
- Effect of Filtering on Texture Assessment of Concrete Surfaces** (107-M05) Duarte Santos, P. M., and Santos Júlio, E. N. B., Jan.-Feb. 2010. 31
- Effect of Mixture Compositions on Workability and Strength of Fly Ash-Based Inorganic Polymer Mortar** (107-M62) Wu, H.-C., and Sun, P., Nov.-Dec. 2010. 554
- Effect of Non-Ground-Granulated Blast-Furnace Slag as Fine Aggregate on Shrinkage Cracking of Mortars** (107-M61) Topcu, I. B., and Bilir, T., Nov.-Dec. 2010. 545
- Effects of Hauling Time on Air-Entrained Self-Consolidating Concrete** (107-M32) Ghafoori, N., and Barfield, M., May-June 2010. 275
- Effects of Liquid Nitrogen Cooling on Fresh Concrete Properties** (107-M16) Juenger, M. C. G.; Solt, S. M.; and Hema, J., Mar.-Apr. 2010. 123
- Efficiency factors** Models for Chloride Diffusion Coefficients of Concretes in Tidal Zone (107-M01) Bermúdez, M. A., and Alaejos, P., Jan.-Feb. 2010. 3
- Electrical conductivity** Triple Percolation in Concrete Reinforced with Carbon Fiber (107-M46) Baeza, F. J.; Chung, D. D. L.; Zornoza, E.; Andión, L. G.; and Garcés, P., July-Aug. 2010. 396

Electrical resistance tomography Electrical Resistance Tomography for Assessment of Cracks in Concrete (107-M60) Karhunen, K.; Seppänen, A.; Lehtikoinen, A.; Blunt, J.; Kaipio, J. P.; and Monteiro, P. J. M., Sept.-Oct. 2010	523
Electrical Resistance Tomography for Assessment of Cracks in Concrete (107-M60) Karhunen, K.; Seppänen, A.; Lehtikoinen, A.; Blunt, J.; Kaipio, J. P.; and Monteiro, P. J. M., Sept.-Oct. 2010	523
Electrical resistivity	
—Carbon-Fiber Cement-Based Materials for Electromagnetic Shielding (107-M68) Muthusamy, S., and Chung, D. D. L., Nov.-Dec. 2010	602
—Instantaneous In-Situ Determination of Water-Cement Ratio of Fresh Concrete (107-M66) Mancio, M.; Moore, J. R.; Brooks, Z.; Monteiro, P. J. M.; and Glaser, S. D., Nov.-Dec. 2010	586
—Triple Percolation in Concrete Reinforced with Carbon Fiber (107-M46) Baeza, F. J.; Chung, D. D. L.; Zornoza, E.; Andión, L. G.; and Garcés, P., July-Aug. 2010	396
Electromagnetic shielding Carbon-Fiber Cement-Based Materials for Electromagnetic Shielding (107-M68) Muthusamy, S., and Chung, D. D. L., Nov.-Dec. 2010	602
El Euch Khay, S. Compacted Sand Concrete in Pavement Construction: An Economical and Environmental Solution (107-M24) Mar.-Apr. 2010	195
El-Tawil, S. Hybrid Rotating/Fixed-Crack Model for High-Performance Fiber-Reinforced Cementitious Composites (107-M64) Nov.-Dec. 2010	568
Energy absorption Polyvinyl Alcohol Fiber-Reinforced Mortars for Masonry Applications (107-M09) Skourup, B. N., and Erdogmus, E., Jan.-Feb. 2010	57
Engineered cementitious composites	
—Assessing Mechanical Properties and Microstructure of Fire-Damaged Engineered Cementitious Composites (107-M35) Sahmaran, M.; Lachemi, M.; and Li, V. C., May-June 2010	297
—Self-Healing Characterization of Engineered Cementitious Composite Materials (107-M70) Kan, L.-L.; Shi, H.-S.; Sakulich, A. R.; and Li, V. C., Nov.-Dec. 2010	617
Environmental effects Environmental Effects on Mechanical Properties of Wet Lay-Up Fiber-Reinforced Polymer (107-M31) Saadatmanesh, H.; Tavakkolizadeh, M.; and Mostofinejad, D., May-June 2010	267
Environmental Effects on Mechanical Properties of Wet Lay-Up Fiber-Reinforced Polymer (107-M31) Saadatmanesh, H.; Tavakkolizadeh, M.; and Mostofinejad, D., May-June 2010	267
Epoxy Measurement of Oxygen Permeability of Epoxy Polymers (107-M18) Khoe, C.; Chowdhury, S.; Bhethanabotla, V. R.; and Sen, R., Mar.-Apr. 2010	138
Erdogmus, E. Polyvinyl Alcohol Fiber-Reinforced Mortars for Masonry Applications (107-M09) Jan.-Feb. 2010	57
Expansion of MgO in Cement Pastes Measured by Different Methods (107-M12)	
—Nokken, M. R., Jan.-Feb. 2010	80
—Disc. by Wang, H., and Qi, C., Nov.-Dec. 2010	640
Expansion pressure Modeling Mechanical Behavior of Reinforced Concrete due to Corrosion of Steel Bar (107-M14) Kim, K. H.; Jang, S. Y.; Jang, B. S.; and Oh, B. H., Mar.-Apr. 2010	106
Experimental Study on Mechanical Properties of Concrete Confined with Plastic Pipe (107-M17) Wang, J., and Yang, Q., Mar.-Apr. 2010	132
Ezziane, K. Analysis of Mortar Long-Term Strength with Supplementary Cementitious Materials Cured at Different Temperatures (107-M37) July-Aug. 2010	323

F

Fabric Environmental Effects on Mechanical Properties of Wet Lay-Up Fiber-Reinforced Polymer (107-M31) Saadatmanesh, H.; Tavakkolizadeh, M.; and Mostofinejad, D., May-June 2010	267
Fatigue Compacted Sand Concrete in Pavement Construction: An Economical and Environmental Solution (107-M24) El Euch Khay, S.; Neji, J.; and Loulizi, A., Mar.-Apr. 2010	195
Fiber Carbon-Fiber Cement-Based Materials for Electromagnetic Shielding (107-M68) Muthusamy, S., and Chung, D. D. L., Nov.-Dec. 2010	602
Fiber-reinforced concrete Influence of Fiber Type on Creep Deformation of Cracked Fiber-Reinforced Shotcrete Panels (107-M54) Bernard, E. S., Sept.-Oct. 2010	474

Fiber-reinforced mortar Polyvinyl Alcohol Fiber-Reinforced Mortars for Masonry Applications (107-M09) Skourup, B. N., and Erdogmus, E., Jan.-Feb. 2010	57
Fiber-reinforced polymer	
—Corrosion Protection of Fiber-Reinforced Polymer-Wrapped Reinforced Concrete (107-M40) Gadve, S.; Mukherjee, A.; and Malhotra, S. N., July-Aug. 2010	349
—Environmental Effects on Mechanical Properties of Wet Lay-Up Fiber-Reinforced Polymer (107-M31) Saadatmanesh, H.; Tavakkolizadeh, M.; and Mostofinejad, D., May-June 2010	267
Field implementation Thermal Strain and Drying Shrinkage of Concrete Structures in the Field (107-M57) Choi, S., and Won, M. C., Sept.-Oct. 2010	498
Filter Effect of Filtering on Texture Assessment of Concrete Surfaces (107-M05) Duarte Santos, P. M., and Santos Júlio, E. N. B., Jan.-Feb. 2010	31
Fine aggregate	
—Effect of Bottom Ash as Fine Aggregate on Shrinkage Cracking of Mortars (107-M08) Topçu, I. B., and Bilir, T., Jan.-Feb. 2010	48
—Effect of Non-Ground-Granulated Blast-Furnace Slag as Fine Aggregate on Shrinkage Cracking of Mortars (107-M61) Topçu, I. B., and Bilir, T., Nov.-Dec. 2010	545
Finite element analysis Ultra-High-Strength, Glass Fiber-Reinforced Concrete: Mechanical Behavior and Numerical Modeling (107-M23) Roth, M. J.; Eamon, C. D.; Slawson, T. R.; Tonyan, T. D.; and Dubey, A., Mar.-Apr. 2010	185
Fire resistance Assessing Mechanical Properties and Microstructure of Fire-Damaged Engineered Cementitious Composites (107-M35) Sahmaran, M.; Lachemi, M.; and Li, V. C., May-June 2010	297
Fixed-crack approach Hybrid Rotating/Fixed-Crack Model for High-Performance Fiber-Reinforced Cementitious Composites (107-M64) Hung, C.-C., and El-Tawil, S., Nov.-Dec. 2010	568
Flexural strength Compacted Sand Concrete in Pavement Construction: An Economical and Environmental Solution (107-M24) El Euch Khay, S.; Neji, J.; and Loulizi, A., Mar.-Apr. 2010	195
Flexural test Ultra-High-Strength, Glass Fiber-Reinforced Concrete: Mechanical Behavior and Numerical Modeling (107-M23) Roth, M. J.; Eamon, C. D.; Slawson, T. R.; Tonyan, T. D.; and Dubey, A., Mar.-Apr. 2010	185
Flexure Polyvinyl Alcohol Fiber-Reinforced Mortars for Masonry Applications (107-M09) Skourup, B. N., and Erdogmus, E., Jan.-Feb. 2010	57
Flexure strength Corrosion Protection of Fiber-Reinforced Polymer-Wrapped Reinforced Concrete (107-M40) Gadve, S.; Mukherjee, A.; and Malhotra, S. N., July-Aug. 2010	349
Fly ash	
—Correlation of Reaction Products and Expansion Potential in Alkali-Silica Reaction for Blended Cement Materials (107-M44) Bonakdar, A.; Mobasher, B.; Dey, S. K.; and Roy, D. M., July-Aug. 2010	380
—Effect of Mixture Compositions on Workability and Strength of Fly Ash-Based Inorganic Polymer Mortar (107-M62) Wu, H.-C., and Sun, P., Nov.-Dec. 2010	554
—Synergistic Effect between Glass Frit and Blast-Furnace Slag (107-M11) Laldji, S.; Phithaksounthone, A.; and Tagnit-Hamou, A., Jan.-Feb. 2010	75
Fly ash-based concrete Strength-Cementitious Material-Water Relationship for Proportioning of Fly Ash-Based Concrete (107-M39) Chowdhury, S., and Basu, P. C., July-Aug. 2010	340
Formwork pressure Intrinsic Model to Predict Formwork Pressure (107-M03) Kwon, S. H.; Shah, S. P.; Phung, Q. T.; Kim, J. H.; and Lee, Y., Jan.-Feb. 2010	20
Fournier, B. Investigation of Alkali-Silica Reaction Inhibited by New Lithium Compound (107-M06) Jan.-Feb. 2010	37
Fracture energy Effect of Aggregate Type on Mechanical Properties of Reactive Powder Concrete (107-M50) Aydin, S.; Yazici, H.; Yardimci, M. Y.; and Yigiter, H., Sept.-Oct. 2010	441
Frequency analysis Wavelet Analysis of Ultrasonic Pulses in Cement-Based Materials (107-M29) Nogueira, C. L., May-June 2010	248
Fresh concrete Instantaneous In-Situ Determination of Water-Cement Ratio of Fresh Concrete (107-M66) Mancio, M.; Moore, J. R.; Brooks, Z.; Monteiro, P. J. M.; and Glaser, S. D., Nov.-Dec. 2010	586

G

- Gadve, S.** Corrosion Protection of Fiber-Reinforced Polymer-Wrapped Reinforced Concrete (107-M40) July-Aug. 2010 349
- Gan, W.-Z.** Design and Research on Gradient Structure Concrete Based on Volumetric Stabilization (107-M69) Nov.-Dec. 2010 611
- Garcés, P.** Triple Percolation in Concrete Reinforced with Carbon Fiber (107-M46) July-Aug. 2010 396
- Geopolymer** Effect of Mixture Compositions on Workability and Strength of Fly Ash-Based Inorganic Polymer Mortar (107-M62) Wu, H.-C., and Sun, P., Nov.-Dec. 2010 554
- Ghafoori, N.** Effects of Hauling Time on Air-Entrained Self-Consolidating Concrete (107-M32) May-June 2010 275
- Glaser, S. D.** Instantaneous In-Situ Determination of Water-Cement Ratio of Fresh Concrete (107-M66) Nov.-Dec. 2010 586
- Glass fiber-reinforced concrete** Ultra-High-Strength, Glass Fiber-Reinforced Concrete: Mechanical Behavior and Numerical Modeling (107-M23) Roth, M. J.; Eamon, C. D.; Slawson, T. R.; Tonyan, T. D.; and Dubey, A., Mar.-Apr. 2010 185
- Glass frit** Synergistic Effect between Glass Frit and Blast-Furnace Slag (107-M11) Laldji, S.; Phithaksounthone, A.; and Tagnit-Hamou, A., Jan.-Feb. 2010 75
- Gradient** Design and Research on Gradient Structure Concrete Based on Volumetric Stabilization (107-M69) Wen, X.-D.; Ma, B.-G.; Gan, W.-Z.; and Xian, Z.-W., Nov.-Dec. 2010 611
- Grain-size distribution** Wavelet Analysis of Ultrasonic Pulses in Cement-Based Materials (107-M29) Nogueira, C. L., May-June 2010 248
- Gregori, A.** Artificial Neural Network Modeling of Early-Age Dynamic Young's Modulus of Normal Concrete (107-M33) May-June 2010 282
- Ground-granulated blast-furnace slag** Effect of Non-Ground-Granulated Blast-Furnace Slag as Fine Aggregate on Shrinkage Cracking of Mortars (107-M61) Topçu, I. B., and Bilir, T., Nov.-Dec. 2010 545

H

- Hardened state properties** New Methodology to Proportion Self-Consolidating Concrete with High-Volume Fly Ash (107-M26) Chowdhury, S., and Basu, P. C., May-June 2010 222
- Haselbach, L. M.** Calcium Hydroxide Formation in Thin Cement Paste Exposed to Air (107-M42) July-Aug. 2010 365
- Hauling time** Effects of Hauling Time on Air-Entrained Self-Consolidating Concrete (107-M32) Ghafoori, N., and Barfield, M., May-June 2010 275
- Haynes, H.** Salt Weathering of Concrete by Sodium Carbonate and Sodium Chloride (107-M30) May-June 2010 258
- Hema, J.** Effects of Liquid Nitrogen Cooling on Fresh Concrete Properties (107-M16) Mar.-Apr. 2010 123
- High-density polyethylene pipe** Experimental Study on Mechanical Properties of Concrete Confined with Plastic Pipe (107-M17) Wang, J., and Yang, Q., Mar.-Apr. 2010 132
- High-performance concrete** Creep Behavior of High-Strength Concrete with Polypropylene Fibers at Elevated Temperatures (107-M22) Wu, B.; Lam, E. S.-S.; Liu, Q.; Chung, W. Y.-M.; and Ho, I. F.-Y., Mar.-Apr. 2010 176
- High-performance fiber-reinforced cementitious composites** Hybrid Rotating/Fixed-Crack Model for High-Performance Fiber-Reinforced Cementitious Composites (107-M64) Hung, C.-C., and El-Tawil, S., Nov.-Dec. 2010 568
- High-range water-reducing admixture** Performance of Cast-in-Place Self-Consolidating Concrete Made with Various Types of Viscosity-Enhancing Admixtures (107-M47) Khayat, K. H.; Hwang, S.-D.; and Belaid, K., July-Aug. 2010 403
- High-strength concrete**
—Self-Consolidating High-Strength Concrete Optimization by Mixture Design Method (107-M41) Akalin, O.; Akay, K. U.; and Sennaroglu, B., July-Aug. 2010 357
—Size and Wall Effects on Compressive Strength of Concretes (107-M43) Turkel, A., and Ozkul, M. H., July-Aug. 2010 372
- High-volume fly ash** Powder Additions to Mitigate Retardation in High-Volume Fly Ash Mixtures (107-M58) Bentz, D. P., Sept.-Oct. 2010 508

- Ho, I. F.-Y.** Creep Behavior of High-Strength Concrete with Polypropylene Fibers at Elevated Temperatures (107-M22) Mar.-Apr. 2010 176
- Host, J.** Conductive Concrete for Cathodic Protection of Bridge Decks (107-M65) Nov.-Dec. 2010 577
- Hot weather concreting** Effects of Liquid Nitrogen Cooling on Fresh Concrete Properties (107-M16) Juenger, M. C. G.; Solt, S. M.; and Hema, J., Mar.-Apr. 2010 123
- Hu, S.** Temperature Stability of Compressive Strength of Cement Asphalt Mortar (107-M04) Jan.-Feb. 2010 27
- Hung, C.-C.** Hybrid Rotating/Fixed-Crack Model for High-Performance Fiber-Reinforced Cementitious Composites (107-M64) Nov.-Dec. 2010 568
- Hunger, K.-J.** Investigation of Alkali-Silica Reaction Inhibited by New Lithium Compound (107-M06) Jan.-Feb. 2010 37
- Hwang, S.-D.** Performance of Cast-in-Place Self-Consolidating Concrete Made with Various Types of Viscosity-Enhancing Admixtures (107-M47) July-Aug. 2010 403
- Hybrid Rotating/Fixed-Crack Model for High-Performance Fiber-Reinforced Cementitious Composites** (107-M64) Hung, C.-C., and El-Tawil, S., Nov.-Dec. 2010 568
- Hydration**
—Powder Additions to Mitigate Retardation in High-Volume Fly Ash Mixtures (107-M58) Bentz, D. P., Sept.-Oct. 2010 508
—Strength-Cementitious Material-Water Relationship for Proportioning of Fly Ash-Based Concrete (107-M39) Chowdhury, S., and Basu, P. C., July-Aug. 2010 340
- I**
- Image analysis** Early-Age Shrinkage Strains Versus Depth of Low Water-Cement Ratio Mortar Prisms (107-M25) Ong, K. C. G.; Chandra, L. R.; and Myint-Lay, K., May-June 2010 213
- Imaging**
—Electrical Resistance Tomography for Assessment of Cracks in Concrete (107-M60) Karhunen, K.; Seppänen, A.; Lehtikoinen, A.; Blunt, J.; Kaipio, J. P.; and Monteiro, P. J. M., Sept.-Oct. 2010 523
—Inspection of Concrete Using Air-Coupled Ultrasonic Pulse Velocity (107-M20) Cetrangolo, G. P., and Popovics, J. S., Mar.-Apr. 2010 155
- Impressed current** Conductive Concrete for Cathodic Protection of Bridge Decks (107-M65) Yehia, S., and Host, J., Nov.-Dec. 2010 577
- Inclined plane** Inclined Plane Test to Evaluate Structural Buildup at Rest of Self-Consolidating Concrete (107-M59) Khayat, K. H.; Omran, A. F.; and Pavate, T. V., Sept.-Oct. 2010 515
- Inclined Plane Test to Evaluate Structural Buildup at Rest of Self-Consolidating Concrete** (107-M59) Khayat, K. H.; Omran, A. F.; and Pavate, T. V., Sept.-Oct. 2010 515
- Index** Precision of Compressive Strength Testing of Concrete with Different Cylinder Specimen Sizes (107-M52) Taghaddos, H.; Soleymani, H. R.; and Robson, J. D., Sept.-Oct. 2010 461
- Influence of Chemistry of Chloride Ions in Cement Matrix on Corrosion of Steel** (107-M38) Song, H.-W.; Jung, M.-S.; Lee, C.-H.; Kim, S.-H.; and Ann, K. Y., July-Aug. 2010 332
- Influence of Fiber Type on Creep Deformation of Cracked Fiber-Reinforced Shotcrete Panels** (107-M54) Bernard, E. S., Sept.-Oct. 2010 474
- Influence of Mixing Sequence on Cement-Admixture Interaction** (106-M55)
—Chen, C.-T., and Struble, L. J., Nov.-Dec. 2009 503
—Disc. by Venkatchalapathy, V., Sept.-Oct. 2010 532
- Initial damage** Bidirectional Multiple Cracking Tests on High-Performance Fiber-Reinforced Cementitious Composite Plates (107-M51) Suryanto, B.; Nagai, K.; and Maekawa, K., Sept.-Oct. 2010 450
- Inorganic polymer** Effect of Mixture Compositions on Workability and Strength of Fly Ash-Based Inorganic Polymer Mortar (107-M62) Wu, H.-C., and Sun, P., Nov.-Dec. 2010 554
- Inspection of Concrete Using Air-Coupled Ultrasonic Pulse Velocity** (107-M20) Cetrangolo, G. P., and Popovics, J. S., Mar.-Apr. 2010 155
- Instantaneous In-Situ Determination of Water-Cement Ratio of Fresh Concrete** (107-M66) Mancio, M.; Moore, J. R.; Brooks, Z.; Monteiro, P. J. M.; and Glaser, S. D., Nov.-Dec. 2010 586

Interface

- Comparison of Methods for Texture Assessment of Concrete Surfaces (107-M49) Santos, P. M. D., and Santos Júlio, E. N. B., Sept.-Oct. 2010. 433
- Effect of Filtering on Texture Assessment of Concrete Surfaces (107-M05) Duarte Santos, P. M., and Santos Júlio, E. N. B., Jan.-Feb. 2010. 31
- Interface Tailoring of Polyester-Type Fiber in Engineered Cementitious Composite Matrix against Pullout** (107-M15) Rathod, J. D., and Patodi, S. C., Mar.-Apr. 2010. 114
- Interfacial transition zone Corrosion Process of Steel Bar in Concrete in Full Lifetime** (107-M63) Yuan, Y.; Jiang, J.; and Peng, T., Nov.-Dec. 2010. 562
- Intrinsic model Intrinsic Model to Predict Formwork Pressure** (107-M03) Kwon, S. H.; Shah, S. P.; Phung, Q. T.; Kim, J. H.; and Lee, Y., Jan.-Feb. 2010. 20
- Intrinsic Model to Predict Formwork Pressure** (107-M03) Kwon, S. H.; Shah, S. P.; Phung, Q. T.; Kim, J. H.; and Lee, Y., Jan.-Feb. 2010. 20
- Investigation into Yield Behavior of Fresh Cement Paste: Model and Experiment** (107-M02) Lu, G., and Wang, K., Jan.-Feb. 2010. 12
- Investigation of Alkali-Silica Reaction Inhibited by New Lithium Compound** (107-M06) Mo, X.; Zhang, Y.; Yu, C.; Deng, M.; Tang, M.; Hüniger, K.-J.; and Fournier, B., Jan.-Feb. 2010. 37
- Isothermal calorimetry Powder Additions to Mitigate Retardation in High-Volume Fly Ash Mixtures** (107-M58) Bentz, D. P., Sept.-Oct. 2010. 508

J

- Jang, B. S.** Modeling Mechanical Behavior of Reinforced Concrete due to Corrosion of Steel Bar (107-M14) Mar.-Apr. 2010. 106
- Jang, S. Y.** Modeling Mechanical Behavior of Reinforced Concrete due to Corrosion of Steel Bar (107-M14) Mar.-Apr. 2010. 106
- Jiang, J.** Corrosion Process of Steel Bar in Concrete in Full Lifetime (107-M63) Nov.-Dec. 2010. 562
- Juenger, M. C. G.** Effects of Liquid Nitrogen Cooling on Fresh Concrete Properties (107-M16) Mar.-Apr. 2010. 123
- Jung, M.-S.** Influence of Chemistry of Chloride Ions in Cement Matrix on Corrosion of Steel (107-M38) July-Aug. 2010. 332

K

- Kadri, E.-H.** Analysis of Mortar Long-Term Strength with Supplementary Cementitious Materials Cured at Different Temperatures (107-M37) July-Aug. 2010. 323
- Kaipio, J. P.** Electrical Resistance Tomography for Assessment of Cracks in Concrete (107-M60) Sept.-Oct. 2010. 523
- Kaloush, K. E.** Effect of Different Dosages of Polypropylene Fibers in Thin Whitetopping Concrete Pavements (107-M07) Jan.-Feb. 2010. 42
- Kan, L.-L.** Self-Healing Characterization of Engineered Cementitious Composite Materials (107-M70) Nov.-Dec. 2010. 617
- Karhunen, K.** Electrical Resistance Tomography for Assessment of Cracks in Concrete (107-M60) Sept.-Oct. 2010. 523
- Khayat, K. H.**
 - Inclined Plane Test to Evaluate Structural Buildup at Rest of Self-Consolidating Concrete (107-M59) Sept.-Oct. 2010. 515
 - Performance of Cast-in-Place Self-Consolidating Concrete Made with Various Types of Viscosity-Enhancing Admixtures (107-M47) July-Aug. 2010. 403
 - Shrinkage of Precast, Prestressed Self-Consolidating Concrete (107-M27) May-June 2010. 231
- Kheder, G. F.** New Method for Proportioning Self-Consolidating Concrete Based on Compressive Strength Requirements (107-M56) Sept.-Oct. 2010. 490
- Khoe, C.** Measurement of Oxygen Permeability of Epoxy Polymers (107-M18) Mar.-Apr. 2010. 138
- Kim, J. H.** Intrinsic Model to Predict Formwork Pressure (107-M03) Jan.-Feb. 2010. 20
- Kim, K. H.** Modeling Mechanical Behavior of Reinforced Concrete due to Corrosion of Steel Bar (107-M14) Mar.-Apr. 2010. 106
- Kim, S.-H.** Influence of Chemistry of Chloride Ions in Cement Matrix on Corrosion of Steel (107-M38) July-Aug. 2010. 332

- Kirkner, D. J.** Compressive Strength Relationships for Concrete under Elevated Temperatures (107-M21) Mar.-Apr. 2010. 164
- Knaack, A. M.** Compressive Strength Relationships for Concrete under Elevated Temperatures (107-M21) Mar.-Apr. 2010. 164
- Kondraivendhan, B.** Effect of Age and Water-Cement Ratio on Size and Dispersion of Pores in Ordinary Portland Cement Paste (107-M19) Mar.-Apr. 2010. 147
- Kosbab, B. D.** Effect of Calcium Chloride and Initial Curing Temperature on Expansion Caused by Sulfate Exposure (107-M72) Nov.-Dec. 2010. 632
- Kurama, Y. C.** Compressive Strength Relationships for Concrete under Elevated Temperatures (107-M21) Mar.-Apr. 2010. 164
- Kurtis, K. E.** Effect of Calcium Chloride and Initial Curing Temperature on Expansion Caused by Sulfate Exposure (107-M72) Nov.-Dec. 2010. 632
- Kwon, S. H.** Intrinsic Model to Predict Formwork Pressure (107-M03) Jan.-Feb. 2010. 20

L

- Lachemi, M.** Assessing Mechanical Properties and Microstructure of Fire-Damaged Engineered Cementitious Composites (107-M35) May-June 2010. 297
- Laldji, S.** Synergistic Effect between Glass Frit and Blast-Furnace Slag (107-M11) Jan.-Feb. 2010. 75
- Lam, E. S.-S.** Creep Behavior of High-Strength Concrete with Polypropylene Fibers at Elevated Temperatures (107-M22) Mar.-Apr. 2010. 176
- Laser scanning** Comparison of Methods for Texture Assessment of Concrete Surfaces (107-M49) Santos, P. M. D., and Santos Júlio, E. N. B., Sept.-Oct. 2010. 433
- Lee, C.-H.** Influence of Chemistry of Chloride Ions in Cement Matrix on Corrosion of Steel (107-M38) July-Aug. 2010. 332
- Lee, Y.** Intrinsic Model to Predict Formwork Pressure (107-M03) Jan.-Feb. 2010. 20
- Lehikoinen, A.** Electrical Resistance Tomography for Assessment of Cracks in Concrete (107-M60) Sept.-Oct. 2010. 523
- Li, V. C.**
 - Assessing Mechanical Properties and Microstructure of Fire-Damaged Engineered Cementitious Composites (107-M35) May-June 2010. 297
 - Self-Healing Characterization of Engineered Cementitious Composite Materials (107-M70) Nov.-Dec. 2010. 617
- Limestone** Analysis of Mortar Long-Term Strength with Supplementary Cementitious Materials Cured at Different Temperatures (107-M37) Ezziame, K.; Kadri, E.-H.; Bougara, A.; and Bennacer, R., July-Aug. 2010. 323
- Limestone filler** Time Evolution of Chloride Penetration in Blended Cement Concrete (107-M67) Villagrán-Zaccardi, Y. A.; Taus, V. L.; and Di Maio, Á. A., Nov.-Dec. 2010. 593
- Limewater** Expansion of MgO in Cement Pastes Measured by Different Methods (107-M12) Nokken, M. R., Jan.-Feb. 2010. 80
- Lithium compounds** Investigation of Alkali-Silica Reaction Inhibited by New Lithium Compound (107-M06) Mo, X.; Zhang, Y.; Yu, C.; Deng, M.; Tang, M.; Hüniger, K.-J.; and Fournier, B., Jan.-Feb. 2010. 37
- Liu, L.** Calcium Hydroxide Formation in Thin Cement Paste Exposed to Air (107-M42) July-Aug. 2010. 365
- Liu, Q.** Creep Behavior of High-Strength Concrete with Polypropylene Fibers at Elevated Temperatures (107-M22) Mar.-Apr. 2010. 176
- Liu, Z.** Temperature Stability of Compressive Strength of Cement Asphalt Mortar (107-M04) Jan.-Feb. 2010. 27
- Long, W. J.** Shrinkage of Precast, Prestressed Self-Consolidating Concrete (107-M27) May-June 2010. 231
- Longitudinal wave** Numerical Simulation of Stress Waves on Surface of Strongly Heterogeneous Media (107-M53) Aggelis, D. G., Sept.-Oct. 2010. 469
- Long-term durability** Environmental Effects on Mechanical Properties of Wet Lay-Up Fiber-Reinforced Polymer (107-M31) Saadatmanesh, H.; Tavakkolizadeh, M.; and Mostofinejad, D., May-June 2010. 267
- Loulizi, A.** Compacted Sand Concrete in Pavement Construction: An Economical and Environmental Solution (107-M24) Mar.-Apr. 2010. 195
- Lu, G.** Investigation into Yield Behavior of Fresh Cement Paste: Model and Experiment (107-M02) Jan.-Feb. 2010. 12

Ma, B.-G. Design and Research on Gradient Structure Concrete Based on Volumetric Stabilization (107-M69) Nov.-Dec. 2010	611
Macrosynthetic fibers Influence of Fiber Type on Creep Deformation of Cracked Fiber-Reinforced Shotcrete Panels (107-M54) Bernard, E. S., Sept.-Oct. 2010	474
Maekawa, K. Bidirectional Multiple Cracking Tests on High-Performance Fiber-Reinforced Cementitious Composite Plates (107-M51) Sept.-Oct. 2010	450
Malhotra, S. N. Corrosion Protection of Fiber-Reinforced Polymer-Wrapped Reinforced Concrete (107-M40) July-Aug. 2010	349
Mancio, M. Instantaneous In-Situ Determination of Water-Cement Ratio of Fresh Concrete (107-M66) Nov.-Dec. 2010	586
Marine environment Models for Chloride Diffusion Coefficients of Concretes in Tidal Zone (107-M01) Bermúdez, M. A., and Alaejos, P., Jan.-Feb. 2010	3
Masonry structures Polyvinyl Alcohol Fiber-Reinforced Mortars for Masonry Applications (107-M09) Skourup, B. N., and Erdogmus, E., Jan.-Feb. 2010	57
Mass loss Corrosion Protection of Fiber-Reinforced Polymer-Wrapped Reinforced Concrete (107-M40) Gadve, S.; Mukherjee, A.; and Malhotra, S. N., July-Aug. 2010	349
Maximum aggregate size Size and Wall Effects on Compressive Strength of Concretes (107-M43) Turkel, A., and Ozkul, M. H., July-Aug. 2010	372
Measurement of Oxygen Permeability of Epoxy Polymers (107-M18) Khoe, C.; Chowdhury, S.; Bhethanabotla, V. R.; and Sen, R., Mar.-Apr. 2010	138
Mechanical properties Carbon-Fiber Cement-Based Materials for Electromagnetic Shielding (107-M68) Muthusamy, S., and Chung, D. D. L., Nov.-Dec. 2010	602
Meddah, M. S. Effect of Curing Methods on Autogenous Shrinkage and Self-Induced Stress of High-Performance Concrete (107-M10) Jan.-Feb. 2010	65
Mehra, P. K. Salt Weathering of Concrete by Sodium Carbonate and Sodium Chloride (107-M30) May-June 2010	258
Mercury porosimetry Effect of Age and Water-Cement Ratio on Size and Dispersion of Pores in Ordinary Portland Cement Paste (107-M19) Kondraivendhan, B., and Bhattacharjee, B., Mar.-Apr. 2010	147
Method New Method for Proportioning Self-Consolidating Concrete Based on Compressive Strength Requirements (107-M56) Kheder, G. F., and Al Jadiri, R. S., Sept.-Oct. 2010	490
Methylene blue Detection of Aggregate Clay Coatings and Impacts on Concrete (107-M45) Muñoz, J. F.; Tejedor, M. I.; Anderson, M. A.; and Cramer, S. M., July-Aug. 2010	387
MgO-based expansive agent Potential Approach to Evaluating Soundness of Concrete Containing MgO-Based Expansive Agent (107-M13) Mo, L.; Deng, M.; and Tang, M., Mar.-Apr. 2010	99
Microfines Detection of Aggregate Clay Coatings and Impacts on Concrete (107-M45) Muñoz, J. F.; Tejedor, M. I.; Anderson, M. A.; and Cramer, S. M., July-Aug. 2010	387
Microstructure —Assessing Mechanical Properties and Microstructure of Fire-Damaged Engineered Cementitious Composites (107-M35) Sahmaran, M.; Lachemi, M.; and Li, V. C., May-June 2010	297
—Correlation of Reaction Products and Expansion Potential in Alkali-Silica Reaction for Blended Cement Materials (107-M44) Bonakdar, A.; Mobasher, B.; Dey, S. K.; and Roy, D. M., July-Aug. 2010	380
Mineral admixtures Models for Chloride Diffusion Coefficients of Concretes in Tidal Zone (107-M01) Bermúdez, M. A., and Alaejos, P., Jan.-Feb. 2010	3
Mixture proportioning —New Method for Proportioning Self-Consolidating Concrete Based on Compressive Strength Requirements (107-M56) Kheder, G. F., and Al Jadiri, R. S., Sept.-Oct. 2010	490
—New Methodology to Proportion Self-Consolidating Concrete with High-Volume Fly Ash (107-M26) Chowdhury, S., and Basu, P. C., May-June 2010	222

Mo, L. Potential Approach to Evaluating Soundness of Concrete Containing MgO-Based Expansive Agent (107-M13) Mar.-Apr. 2010	99
Mo, X. Investigation of Alkali-Silica Reaction Inhibited by New Lithium Compound (107-M06) Jan.-Feb. 2010	37
Mobasher, B. Correlation of Reaction Products and Expansion Potential in Alkali-Silica Reaction for Blended Cement Materials (107-M44) July-Aug. 2010	380
Modeling Measurement of Oxygen Permeability of Epoxy Polymers (107-M18) Khoe, C.; Chowdhury, S.; Bhethanabotla, V. R.; and Sen, R., Mar.-Apr. 2010	138
Modeling Mechanical Behavior of Reinforced Concrete due to Corrosion of Steel Bar (107-M14) Kim, K. H.; Jang, S. Y.; Jang, B. S.; and Oh, B. H., Mar.-Apr. 2010	106
Models for Chloride Diffusion Coefficients of Concretes in Tidal Zone (107-M01) Bermúdez, M. A., and Alaejos, P., Jan.-Feb. 2010	3
Modulus of elasticity Artificial Neural Network Modeling of Early-Age Dynamic Young's Modulus of Normal Concrete (107-M33) Venkateela, G.; Gregori, A.; Sun, Z.; and Shah, S. P., May-June 2010	282
Moisture loss Early-Age Shrinkage Strains Versus Depth of Low Water-Cement Ratio Mortar Prisms (107-M25) Ong, K. C. G.; Chandra, L. R.; and Myint-Lay, K., May-June 2010	213
Momoki, S. Characterization of Deep Surface-Opening Cracks in Concrete: Feasibility of Impact-Generated Rayleigh-Waves (107-M36) May-June 2010	305
Monteiro, P. J. M. —Electrical Resistance Tomography for Assessment of Cracks in Concrete (107-M60) Sept.-Oct. 2010	523
—Instantaneous In-Situ Determination of Water-Cement Ratio of Fresh Concrete (107-M66) Nov.-Dec. 2010	586
Moore, J. R. Instantaneous In-Situ Determination of Water-Cement Ratio of Fresh Concrete (107-M66) Nov.-Dec. 2010	586
Morris, P. H. Performance of Permeability-Reducing Admixtures in Marine Concrete Structures (107-M34) May-June 2010	291
Mortar —Analysis of Mortar Long-Term Strength with Supplementary Cementitious Materials Cured at Different Temperatures (107-M37) Ezziene, K.; Kadri, E.-H.; Bougara, A.; and Bennacer, R., July-Aug. 2010	323
—Effect of Bottom Ash as Fine Aggregate on Shrinkage Cracking of Mortars (107-M08) Topçu, I. B., and Bilir, T., Jan.-Feb. 2010	48
—Effect of Non-Ground-Granulated Blast-Furnace Slag as Fine Aggregate on Shrinkage Cracking of Mortars (107-M61) Topçu, I. B., and Bilir, T., Nov.-Dec. 2010	545
Mostofinejad, D. Environmental Effects on Mechanical Properties of Wet Lay-Up Fiber-Reinforced Polymer (107-M31) May-June 2010	267
Mukherjee, A. Corrosion Protection of Fiber-Reinforced Polymer-Wrapped Reinforced Concrete (107-M40) July-Aug. 2010	349
Multiple cracks Bidirectional Multiple Cracking Tests on High-Performance Fiber-Reinforced Cementitious Composite Plates (107-M51) Suryanto, B.; Nagai, K.; and Maekawa, K., Sept.-Oct. 2010	450
Muñoz, J. F. Detection of Aggregate Clay Coatings and Impacts on Concrete (107-M45) July-Aug. 2010	387
Muthusamy, S. Carbon-Fiber Cement-Based Materials for Electromagnetic Shielding (107-M68) Nov.-Dec. 2010	602
Myint-Lay, K. Early-Age Shrinkage Strains Versus Depth of Low Water-Cement Ratio Mortar Prisms (107-M25) May-June 2010	213

N

Nagai, K. Bidirectional Multiple Cracking Tests on High-Performance Fiber-Reinforced Cementitious Composite Plates (107-M51) Sept.-Oct. 2010	450
Natural pozzolan Analysis of Mortar Long-Term Strength with Supplementary Cementitious Materials Cured at Different Temperatures (107-M37) Ezziene, K.; Kadri, E.-H.; Bougara, A.; and Bennacer, R., July-Aug. 2010	323
Neff, M. Salt Weathering of Concrete by Sodium Carbonate and Sodium Chloride (107-M30) May-June 2010	258
Neithalath, N. Planar Image-Based Reconstruction of Pervious Concrete Pore Structure and Permeability Prediction (107-M48) July-Aug. 2010	413

Neji, J. Compacted Sand Concrete in Pavement Construction: An Economical and Environmental Solution (107-M24) Mar.-Apr. 2010	195
Neptune, A. I. Effect of Aggregate Size and Gradation on Pervious Concrete Mixtures (107-M71) Nov.-Dec. 2010	625
New Method for Proportioning Self-Consolidating Concrete Based on Compressive Strength Requirements (107-M56) Kheder, G. F., and Al Jadiri, R. S., Sept.-Oct. 2010	490
New Methodology to Proportion Self-Consolidating Concrete with High-Volume Fly Ash (107-M26) Chowdhury, S., and Basu, P. C., May-June 2010	222
New Viscoelastic Model for Early-Age Concrete Based on Measured Strains and Stresses (107-M28) Choi, S. C., and Oh, B. H., May-June 2010	239
Nogueira, C. L. Wavelet Analysis of Ultrasonic Pulses in Cement-Based Materials (107-M29) May-June 2010	248
Nokken, M. R. Expansion of MgO in Cement Pastes Measured by Different Methods (107-M12) Jan.-Feb. 2010	80
Nondestructive evaluation Inspection of Concrete Using Air-Coupled Ultrasonic Pulse Velocity (107-M20) Cetrangolo, G. P., and Popovics, J. S., Mar.-Apr. 2010	155
Nondestructive testing	
—Characterization of Deep Surface-Opening Cracks in Concrete: Feasibility of Impact-Generated Rayleigh-Waves (107-M36) Chai, H. K.; Momoki, S.; Aggelis, D. G.; and Shiotani, T., May-June 2010	305
—Electrical Resistance Tomography for Assessment of Cracks in Concrete (107-M60) Karhunen, K.; Seppänen, A.; Lehtikoinen, A.; Blunt, J.; Kaipio, J. P.; and Monteiro, P. J. M., Sept.-Oct. 2010	523
—Inspection of Concrete Using Air-Coupled Ultrasonic Pulse Velocity (107-M20) Cetrangolo, G. P., and Popovics, J. S., Mar.-Apr. 2010	155
—Instantaneous In-Situ Determination of Water-Cement Ratio of Fresh Concrete (107-M66) Mancio, M.; Moore, J. R.; Brooks, Z.; Monteiro, P. J. M.; and Glaser, S. D., Nov.-Dec. 2010	586
—Numerical Simulation of Stress Waves on Surface of Strongly Heterogeneous Media (107-M53) Aggelis, D. G., Sept.-Oct. 2010	469
—Suitability of Various Measurement Techniques for Assessing Corrosion in Cracked Concrete (107-M55) Otieno, M. B.; Alexander, M. G.; and Beushausen, H. D., Sept.-Oct. 2010	481
—Wavelet Analysis of Ultrasonic Pulses in Cement-Based Materials (107-M29) Nogueira, C. L., May-June 2010	248
Nonstress cylinder Thermal Strain and Drying Shrinkage of Concrete Structures in the Field (107-M57) Choi, S., and Won, M. C., Sept.-Oct. 2010	498
Numerical Simulation of Stress Waves on Surface of Strongly Heterogeneous Media (107-M53) Aggelis, D. G., Sept.-Oct. 2010	469

O

Oh, B. H.

—Modeling Mechanical Behavior of Reinforced Concrete due to Corrosion of Steel Bar (107-M14) Mar.-Apr. 2010	106
—New Viscoelastic Model for Early-Age Concrete Based on Measured Strains and Stresses (107-M28) May-June 2010	239
Omran, A. F. Inclined Plane Test to Evaluate Structural Buildup at Rest of Self-Consolidating Concrete (107-M59) Sept.-Oct. 2010	515
O'Neill, R. Salt Weathering of Concrete by Sodium Carbonate and Sodium Chloride (107-M30) May-June 2010	258
Ong, K. C. G. Early-Age Shrinkage Strains Versus Depth of Low Water-Cement Ratio Mortar Prisms (107-M25) May-June 2010	213
Opening-sliding Bidirectional Multiple Cracking Tests on High-Performance Fiber-Reinforced Cementitious Composite Plates (107-M51) Suryanto, B.; Nagai, K.; and Maekawa, K., Sept.-Oct. 2010	450
Orthogonal Hybrid Rotating/Fixed-Crack Model for High-Performance Fiber-Reinforced Cementitious Composites (107-M64) Hung, C.-C., and El-Tawil, S., Nov.-Dec. 2010	568
Otieno, M. B. Suitability of Various Measurement Techniques for Assessing Corrosion in Cracked Concrete (107-M55) Sept.-Oct. 2010	481
Oxygen Measurement of Oxygen Permeability of Epoxy Polymers (107-M18) Khoe, C.; Chowdhury, S.; Bhethanabotla, V. R.; and Sen, R., Mar.-Apr. 2010	138

Ozkul, M. H. Size and Wall Effects on Compressive Strength of Concretes (107-M43) July-Aug. 2010	372
---	-----

P

Passive protection Corrosion Protection of Fiber-Reinforced Polymer-Wrapped Reinforced Concrete (107-M40) Gadve, S.; Mukherjee, A.; and Malhotra, S. N., July-Aug. 2010	349
Patodi, S. C. Interface Tailoring of Polyester-Type Fiber in Engineered Cementitious Composite Matrix against Pullout (107-M15) Mar.-Apr. 2010	114
Pavate, T. V. Inclined Plane Test to Evaluate Structural Buildup at Rest of Self-Consolidating Concrete (107-M59) Sept.-Oct. 2010	515
Pavements Compacted Sand Concrete in Pavement Construction: An Economical and Environmental Solution (107-M24) El Euch Khay, S.; Neji, J.; and Loulizi, A., Mar.-Apr. 2010	195
Peng, T. Corrosion Process of Steel Bar in Concrete in Full Lifetime (107-M63) Nov.-Dec. 2010	562
Percolation Triple Percolation in Concrete Reinforced with Carbon Fiber (107-M46) Baeza, F. J.; Chung, D. D. L.; Zornoza, E.; Andión, L. G.; and Garcés, P., July-Aug. 2010	396
Performance Investigation of Alkali-Silica Reaction Inhibited by New Lithium Compound (107-M06) Mo, X.; Zhang, Y.; Yu, C.; Deng, M.; Tang, M.; Hüniger, K.-J.; and Fournier, B., Jan.-Feb. 2010	37
Performance of Cast-in-Place Self-Consolidating Concrete Made with Various Types of Viscosity-Enhancing Admixtures (107-M47) Khayat, K. H.; Hwang, S.-D.; and Belaid, K., July-Aug. 2010	403
Performance of Permeability-Reducing Admixtures in Marine Concrete Structures (107-M34) Dao, V. T. N.; Dux, P. F.; Morris, P. H.; and Carse, A. H., May-June 2010	291
Periclase Expansion of MgO in Cement Pastes Measured by Different Methods (107-M12) Nokken, M. R., Jan.-Feb. 2010	80
Permeability	
—Effect of Aggregate Size and Gradation on Pervious Concrete Mixtures (107-M71) Neptune, A. I., and Putman, B. J., Nov.-Dec. 2010	625
—Measurement of Oxygen Permeability of Epoxy Polymers (107-M18) Khoe, C.; Chowdhury, S.; Bhethanabotla, V. R.; and Sen, R., Mar.-Apr. 2010	138
—Planar Image-Based Reconstruction of Pervious Concrete Pore Structure and Permeability Prediction (107-M48) Sumanasooriya, M. S.; Bentz, D. P.; and Neithalath, N., July-Aug. 2010	413
Permeability-reducing admixture Performance of Permeability-Reducing Admixtures in Marine Concrete Structures (107-M34) Dao, V. T. N.; Dux, P. F.; Morris, P. H.; and Carse, A. H., May-June 2010	291
Pervious concrete	
—Calcium Hydroxide Formation in Thin Cement Paste Exposed to Air (107-M42) Haselbach, L. M., and Liu, L., July-Aug. 2010	365
—Effect of Aggregate Size and Gradation on Pervious Concrete Mixtures (107-M71) Neptune, A. I., and Putman, B. J., Nov.-Dec. 2010	625
—Planar Image-Based Reconstruction of Pervious Concrete Pore Structure and Permeability Prediction (107-M48) Sumanasooriya, M. S.; Bentz, D. P.; and Neithalath, N., July-Aug. 2010	413
Phase velocity Wavelet Analysis of Ultrasonic Pulses in Cement-Based Materials (107-M29) Nogueira, C. L., May-June 2010	248
Phithaksounthone, A. Synergistic Effect between Glass Frit and Blast-Furnace Slag (107-M11) Jan.-Feb. 2010	75
Phung, Q. T. Intrinsic Model to Predict Formwork Pressure (107-M03) Jan.-Feb. 2010	20
Physical salt attack Salt Weathering of Concrete by Sodium Carbonate and Sodium Chloride (107-M30) Haynes, H.; O'Neill, R.; Neff, M.; and Mehta, P. K., May-June 2010	258
Planar Image-Based Reconstruction of Pervious Concrete Pore Structure and Permeability Prediction (107-M48) Sumanasooriya, M. S.; Bentz, D. P.; and Neithalath, N., July-Aug. 2010	413
Plane stress Hybrid Rotating/Fixed-Crack Model for High-Performance Fiber-Reinforced Cementitious Composites (107-M64) Hung, C.-C., and El-Tawil, S., Nov.-Dec. 2010	568
Plastic viscosity Performance of Cast-in-Place Self-Consolidating Concrete Made with Various Types of Viscosity-Enhancing Admixtures (107-M47) Khayat, K. H.; Hwang, S.-D.; and Belaid, K., July-Aug. 2010	403

Polypropylene fibers

- Creep Behavior of High-Strength Concrete with Polypropylene Fibers at Elevated Temperatures (107-M22) Wu, B.; Lam, E. S.-S.; Liu, Q.; Chung, W. Y.-M.; and Ho, I. F.-Y., Mar.-Apr. 2010 176
- Effect of Different Dosages of Polypropylene Fibers in Thin Whitetopping Concrete Pavements (107-M07) Rodezno, M. C., and Kaloush, K. E., Jan.-Feb. 2010 42
- Polyvinyl Alcohol Fiber-Reinforced Mortars for Masonry Applications** (107-M09) Skourup, B. N., and Erdogmus, E., Jan.-Feb. 2010 57
- Popovics, J. S.** Inspection of Concrete Using Air-Coupled Ultrasonic Pulse Velocity (107-M20) Mar.-Apr. 2010 155
- Pore size distribution** Effect of Age and Water-Cement Ratio on Size and Dispersion of Pores in Ordinary Portland Cement Paste (107-M19) Kondraivendhan, B., and Bhattacharjee, B., Mar.-Apr. 2010 147
- Porosity**
 - Effect of Aggregate Size and Gradation on Pervious Concrete Mixtures (107-M71) Neptune, A. I., and Putman, B. J., Nov.-Dec. 2010 625
 - Planar Image-Based Reconstruction of Pervious Concrete Pore Structure and Permeability Prediction (107-M48) Sumanasooriya, M. S.; Bentz, D. P.; and Neithalath, N., July-Aug. 2010 413
- Porous pavement** Effect of Aggregate Size and Gradation on Pervious Concrete Mixtures (107-M71) Neptune, A. I., and Putman, B. J., Nov.-Dec. 2010 625
- Post-peak energy** Effect of Different Dosages of Polypropylene Fibers in Thin Whitetopping Concrete Pavements (107-M07) Rodezno, M. C., and Kaloush, K. E., Jan.-Feb. 2010 42
- Potential Approach to Evaluating Soundness of Concrete Containing MgO-Based Expansive Agent** (107-M13) Mo, L.; Deng, M.; and Tang, M., Mar.-Apr. 2010 99
- Powder Additions to Mitigate Retardation in High-Volume Fly Ash Mixtures** (107-M58) Bentz, D. P., Sept.-Oct. 2010 508
- Pozzolanic** Synergistic Effect between Glass Frit and Blast-Furnace Slag (107-M11) Laldji, S.; Phithaksounthone, A.; and Tagnit-Hamou, A., Jan.-Feb. 2010 75
- Precision of Compressive Strength Testing of Concrete with Different Cylinder Specimen Sizes** (107-M52) Taghaddos, H.; Soleymani, H. R.; and Robson, J. D., Sept.-Oct. 2010 461
- Prestressed concrete** Shrinkage of Precast, Prestressed Self-Consolidating Concrete (107-M27) Khayat, K. H., and Long, W. J., May-June 2010 231
- Pullout energy** Interface Tailoring of Polyester-Type Fiber in Engineered Cementitious Composite Matrix against Pullout (107-M15) Rathod, J. D., and Patodi, S. C., Mar.-Apr. 2010 114
- Putman, B. J.** Effect of Aggregate Size and Gradation on Pervious Concrete Mixtures (107-M71) Nov.-Dec. 2010 625

Q

- Qi, C.** Expansion of MgO in Cement Pastes Measured by Different Methods (Disc. 107-M12) Nov.-Dec. 2010 640
- Quality assurance** Instantaneous In-Situ Determination of Water-Cement Ratio of Fresh Concrete (107-M66) Mancio, M.; Moore, J. R.; Brooks, Z.; Monteiro, P. J. M.; and Glaser, S. D., Nov.-Dec. 2010 586
- Quality control** Instantaneous In-Situ Determination of Water-Cement Ratio of Fresh Concrete (107-M66) Mancio, M.; Moore, J. R.; Brooks, Z.; Monteiro, P. J. M.; and Glaser, S. D., Nov.-Dec. 2010 586

R

- Rathod, J. D.** Interface Tailoring of Polyester-Type Fiber in Engineered Cementitious Composite Matrix against Pullout (107-M15) Mar.-Apr. 2010 114
- Rayleigh waves** Characterization of Deep Surface-Opening Cracks in Concrete: Feasibility of Impact-Generated Rayleigh-Waves (107-M36) Chai, H. K.; Momoki, S.; Aggelis, D. G.; and Shiotani, T., May-June 2010 305
- Reaction product** Correlation of Reaction Products and Expansion Potential in Alkali-Silica Reaction for Blended Cement Materials (107-M44) Bonakdar, A.; Mobasher, B.; Dey, S. K.; and Roy, D. M., July-Aug. 2010 380

- Reactive powder concrete** Effect of Aggregate Type on Mechanical Properties of Reactive Powder Concrete (107-M50) Aydin, S.; Yazici, H.; Yardimci, M. Y.; and Yigiter, H., Sept.-Oct. 2010 441
- Rehabilitation** Polyvinyl Alcohol Fiber-Reinforced Mortars for Masonry Applications (107-M09) Skourup, B. N., and Erdogmus, E., Jan.-Feb. 2010 57
- Reinforced concrete**
 - Corrosion Protection of Fiber-Reinforced Polymer-Wrapped Reinforced Concrete (107-M40) Gadve, S.; Mukherjee, A.; and Malhotra, S. N., July-Aug. 2010 349
 - Modeling Mechanical Behavior of Reinforced Concrete due to Corrosion of Steel Bar (107-M14) Kim, K. H.; Jang, S. Y.; Jang, B. S.; and Oh, B. H., Mar.-Apr. 2010 106
- Reinforced concrete corrosion** Models for Chloride Diffusion Coefficients of Concretes in Tidal Zone (107-M01) Bermúdez, M. A., and Alaejos, P., Jan.-Feb. 2010 3
- Relative humidity** Thermal Strain and Drying Shrinkage of Concrete Structures in the Field (107-M57) Choi, S., and Won, M. C., Sept.-Oct. 2010 498
- Relaxation function** New Viscoelastic Model for Early-Age Concrete Based on Measured Strains and Stresses (107-M28) Choi, S. C., and Oh, B. H., May-June 2010 239
- Repeatability** Precision of Compressive Strength Testing of Concrete with Different Cylinder Specimen Sizes (107-M52) Taghaddos, H.; Soleymani, H. R.; and Robson, J. D., Sept.-Oct. 2010 461
- Reproducibility** Precision of Compressive Strength Testing of Concrete with Different Cylinder Specimen Sizes (107-M52) Taghaddos, H.; Soleymani, H. R.; and Robson, J. D., Sept.-Oct. 2010 461
- Residual strength** Effect of Different Dosages of Polypropylene Fibers in Thin Whitetopping Concrete Pavements (107-M07) Rodezno, M. C., and Kaloush, K. E., Jan.-Feb. 2010 42
- Resonant frequency** Self-Healing Characterization of Engineered Cementitious Composite Materials (107-M70) Kan, L.-L.; Shi, H.-S.; Sakulich, A. R.; and Li, V. C., Nov.-Dec. 2010 617
- Retardation**
 - Effects of Liquid Nitrogen Cooling on Fresh Concrete Properties (107-M16) Juenger, M. C. G.; Solt, S. M.; and Hema, J., Mar.-Apr. 2010 123
 - Powder Additions to Mitigate Retardation in High-Volume Fly Ash Mixtures (107-M58) Bentz, D. P., Sept.-Oct. 2010 508
- Rheology**
 - Inclined Plane Test to Evaluate Structural Buildup at Rest of Self-Consolidating Concrete (107-M59) Khayat, K. H.; Omran, A. F.; and Pavate, T. V., Sept.-Oct. 2010 515
 - Investigation into Yield Behavior of Fresh Cement Paste: Model and Experiment (107-M02) Lu, G., and Wang, K., Jan.-Feb. 2010 12
 - New Methodology to Proportion Self-Consolidating Concrete with High-Volume Fly Ash (107-M26) Chowdhury, S., and Basu, P. C., May-June 2010 222
- Ring test** Effect of Non-Ground-Granulated Blast-Furnace Slag as Fine Aggregate on Shrinkage Cracking of Mortars (107-M61) Topcu, I. B., and Bilir, T., Nov.-Dec. 2010 545
- Robson, J. D.** Precision of Compressive Strength Testing of Concrete with Different Cylinder Specimen Sizes (107-M52) Sept.-Oct. 2010 461
- Rodezno, M. C.** Effect of Different Dosages of Polypropylene Fibers in Thin Whitetopping Concrete Pavements (107-M07) Jan.-Feb. 2010 42
- Rotating crack approach** Hybrid Rotating/Fixed-Crack Model for High-Performance Fiber-Reinforced Cementitious Composites (107-M64) Hung, C.-C., and El-Tawil, S., Nov.-Dec. 2010 568
- Roth, M. J.** Ultra-High-Strength, Glass Fiber-Reinforced Concrete: Mechanical Behavior and Numerical Modeling (107-M23) Mar.-Apr. 2010 185
- Roughness**
 - Comparison of Methods for Texture Assessment of Concrete Surfaces (107-M49) Santos, P. M. D., and Santos Júlio, E. N. B., Sept.-Oct. 2010 433
 - Effect of Filtering on Texture Assessment of Concrete Surfaces (107-M05) Duarte Santos, P. M., and Santos Júlio, E. N. B., Jan.-Feb. 2010 31
- Roy, D. M.** Correlation of Reaction Products and Expansion Potential in Alkali-Silica Reaction for Blended Cement Materials (107-M44) July-Aug. 2010 380

- Saadatmanesh, H.** Environmental Effects on Mechanical Properties of Wet Lay-Up Fiber-Reinforced Polymer (107-M31) May-June 2010. 267
- Sahmaran, M.** Assessing Mechanical Properties and Microstructure of Fire-Damaged Engineered Cementitious Composites (107-M35) May-June 2010. 297
- Sakulich, A. R.** Self-Healing Characterization of Engineered Cementitious Composite Materials (107-M70) Nov.-Dec. 2010. 617
- Salt hydration distress** Salt Weathering of Concrete by Sodium Carbonate and Sodium Chloride (107-M30) Haynes, H.; O'Neill, R.; Neff, M.; and Mehta, P. K., May-June 2010. 258
- Salt weathering** Salt Weathering of Concrete by Sodium Carbonate and Sodium Chloride (107-M30) Haynes, H.; O'Neill, R.; Neff, M.; and Mehta, P. K., May-June 2010. 258
- Salt Weathering of Concrete by Sodium Carbonate and Sodium Chloride** (107-M30) Haynes, H.; O'Neill, R.; Neff, M.; and Mehta, P. K., May-June 2010. 258
- Sand** Compacted Sand Concrete in Pavement Construction: An Economical and Environmental Solution (107-M24) El Euch Khay, S.; Neji, J.; and Loulizi, A., Mar.-Apr. 2010. 195
- Sand patch test** Comparison of Methods for Texture Assessment of Concrete Surfaces (107-M49) Santos, P. M. D., and Santos Júlio, E. N. B., Sept.-Oct. 2010. 433
- Santos, P. M. D.** Comparison of Methods for Texture Assessment of Concrete Surfaces (107-M49) Sept.-Oct. 2010. 433
- Santos Júlio, E. N. B.**
—Comparison of Methods for Texture Assessment of Concrete Surfaces (107-M49) Sept.-Oct. 2010. 433
—Effect of Filtering on Texture Assessment of Concrete Surfaces (107-M05) Jan.-Feb. 2010. 31
- Sato, R.** Effect of Curing Methods on Autogenous Shrinkage and Self-Induced Stress of High-Performance Concrete (107-M10) Jan.-Feb. 2010. 65
- Scanning electron microscopy** Effect of Aggregate Type on Mechanical Properties of Reactive Powder Concrete (107-M50) Aydin, S.; Yazici, H.; Yardimci, M. Y.; and Yigitler, H., Sept.-Oct. 2010. 441
- Segregation** Performance of Cast-in-Place Self-Consolidating Concrete Made with Various Types of Viscosity-Enhancing Admixtures (107-M47) Khayat, K. H.; Hwang, S.-D.; and Belaid, K., July-Aug. 2010. 403
- Self-consolidating** New Method for Proportioning Self-Consolidating Concrete Based on Compressive Strength Requirements (107-M56) Kheder, G. F., and Al Jadiri, R. S., Sept.-Oct. 2010. 490
- Self-consolidating concrete**
—Effects of Hauling Time on Air-Entrained Self-Consolidating Concrete (107-M32) Ghafouri, N., and Barfield, M., May-June 2010. 275
—Inclined Plane Test to Evaluate Structural Buildup at Rest of Self-Consolidating Concrete (107-M59) Khayat, K. H.; Omran, A. F.; and Pavate, T. V., Sept.-Oct. 2010. 515
—Intrinsic Model to Predict Formwork Pressure (107-M03) Kwon, S. H.; Shah, S. P.; Phung, Q. T.; Kim, J. H.; and Lee, Y., Jan.-Feb. 2010. 20
—New Methodology to Proportion Self-Consolidating Concrete with High-Volume Fly Ash (107-M26) Chowdhury, S., and Basu, P. C., May-June 2010. 222
—Performance of Cast-in-Place Self-Consolidating Concrete Made with Various Types of Viscosity-Enhancing Admixtures (107-M47) Khayat, K. H.; Hwang, S.-D.; and Belaid, K., July-Aug. 2010. 403
—Self-Consolidating High-Strength Concrete Optimization by Mixture Design Method (107-M41) Akalin, O.; Akay, K. U.; and Sennaroglu, B., July-Aug. 2010. 357
—Shrinkage of Precast, Prestressed Self-Consolidating Concrete (107-M27) Khayat, K. H., and Long, W. J., May-June 2010. 231
- Self-Consolidating High-Strength Concrete Optimization by Mixture Design Method** (107-M41) Akalin, O.; Akay, K. U.; and Sennaroglu, B., July-Aug. 2010. 357
- Self-healing** Self-Healing Characterization of Engineered Cementitious Composite Materials (107-M70) Kan, L.-L.; Shi, H.-S.; Sakulich, A. R.; and Li, V. C., Nov.-Dec. 2010. 617
- Self-Healing Characterization of Engineered Cementitious Composite Materials** (107-M70) Kan, L.-L.; Shi, H.-S.; Sakulich, A. R.; and Li, V. C., Nov.-Dec. 2010. 617
- Self-healing process** Self-Healing Characterization of Engineered Cementitious Composite Materials (107-M70) Kan, L.-L.; Shi, H.-S.; Sakulich, A. R.; and Li, V. C., Nov.-Dec. 2010. 617
- Self-healing product** Self-Healing Characterization of Engineered Cementitious Composite Materials (107-M70) Kan, L.-L.; Shi, H.-S.; Sakulich, A. R.; and Li, V. C., Nov.-Dec. 2010. 617
- Self-induced stress** Effect of Curing Methods on Autogenous Shrinkage and Self-Induced Stress of High-Performance Concrete (107-M10) Meddah, M. S., and Sato, R., Jan.-Feb. 2010. 65
- Sen, R.** Measurement of Oxygen Permeability of Epoxy Polymers (107-M18) Mar.-Apr. 2010. 138
- Sennaroglu, B.** Self-Consolidating High-Strength Concrete Optimization by Mixture Design Method (107-M41) July-Aug. 2010. 357
- Seppänen, A.** Electrical Resistance Tomography for Assessment of Cracks in Concrete (107-M60) Sept.-Oct. 2010. 523
- Setting time** Effects of Liquid Nitrogen Cooling on Fresh Concrete Properties (107-M16) Juenger, M. C. G.; Solt, S. M.; and Hema, J., Mar.-Apr. 2010. 123
- Shah, S. P.**
—Artificial Neural Network Modeling of Early-Age Dynamic Young's Modulus of Normal Concrete (107-M33) May-June 2010. 282
—Intrinsic Model to Predict Formwork Pressure (107-M03) Jan.-Feb. 2010. 20
- Shear retention factor** Hybrid Rotating/Fixed-Crack Model for High-Performance Fiber-Reinforced Cementitious Composites (107-M64) Hung, C.-C., and El-Tawil, S., Nov.-Dec. 2010. 568
- Shi, H.-S.** Self-Healing Characterization of Engineered Cementitious Composite Materials (107-M70) Nov.-Dec. 2010. 617
- Shiotani, T.** Characterization of Deep Surface-Opening Cracks in Concrete: Feasibility of Impact-Generated Rayleigh-Waves (107-M36) May-June 2010. 305
- Shrinkage**
—Early-Age Shrinkage Strains Versus Depth of Low Water-Cement Ratio Mortar Prisms (107-M25) Ong, K. C. G.; Chandra, L. R.; and Myint-Lay, K., May-June 2010. 213
—Effect of Bottom Ash as Fine Aggregate on Shrinkage Cracking of Mortars (107-M08) Topçu, I. B., and Bilir, T., Jan.-Feb. 2010. 48
—Effect of Non-Ground-Granulated Blast-Furnace Slag as Fine Aggregate on Shrinkage Cracking of Mortars (107-M61) Topçu, I. B., and Bilir, T., Nov.-Dec. 2010. 545
- Shrinkage models** Shrinkage of Precast, Prestressed Self-Consolidating Concrete (107-M27) Khayat, K. H., and Long, W. J., May-June 2010. 231
- Shrinkage of Precast, Prestressed Self-Consolidating Concrete** (107-M27) Khayat, K. H., and Long, W. J., May-June 2010. 231
- Shrinkage-reducing agent** Effect of Curing Methods on Autogenous Shrinkage and Self-Induced Stress of High-Performance Concrete (107-M10) Meddah, M. S., and Sato, R., Jan.-Feb. 2010. 65
- Silica fume**
—Carbon-Fiber Cement-Based Materials for Electromagnetic Shielding (107-M68) Muthusamy, S., and Chung, D. D. L., Nov.-Dec. 2010. 602
—Effect of Curing Methods on Autogenous Shrinkage and Self-Induced Stress of High-Performance Concrete (107-M10) Meddah, M. S., and Sato, R., Jan.-Feb. 2010. 65
—Synergistic Effect between Glass Frit and Blast-Furnace Slag (107-M11) Laldji, S.; Phithaksounthone, A.; and Tagnit-Hamou, A., Jan.-Feb. 2010. 75
- Silica gel** Correlation of Reaction Products and Expansion Potential in Alkali-Silica Reaction for Blended Cement Materials (107-M44) Bonakdar, A.; Mobasher, B.; Dey, S. K.; and Roy, D. M., July-Aug. 2010. 380
- Silicate glass** Correlation of Reaction Products and Expansion Potential in Alkali-Silica Reaction for Blended Cement Materials (107-M44) Bonakdar, A.; Mobasher, B.; Dey, S. K.; and Roy, D. M., July-Aug. 2010. 380
- Simulation** Numerical Simulation of Stress Waves on Surface of Strongly Heterogeneous Media (107-M53) Aggelis, D. G., Sept.-Oct. 2010. 469
- Size** Precision of Compressive Strength Testing of Concrete with Different Cylinder Specimen Sizes (107-M52) Taghaddos, H.; Soleymani, H. R.; and Robson, J. D., Sept.-Oct. 2010. 461

Size and Wall Effects on Compressive Strength of Concretes (107-M43) Turkel, A., and Ozkul, M. H., July-Aug. 2010	372
Size effect Size and Wall Effects on Compressive Strength of Concretes (107-M43) Turkel, A., and Ozkul, M. H., July-Aug. 2010	372
Sizing Carbon-Fiber Cement-Based Materials for Electromagnetic Shielding (107-M68) Muthusamy, S., and Chung, D. D. L., Nov.-Dec. 2010	602
Skourup, B. N. Polyvinyl Alcohol Fiber-Reinforced Mortars for Masonry Applications (107-M09) Jan.-Feb. 2010	57
Slag	
—Analysis of Mortar Long-Term Strength with Supplementary Cementitious Materials Cured at Different Temperatures (107-M37) Ezziene, K.; Kadri, E.-H.; Bougara, A.; and Bennacer, R., July-Aug. 2010	323
—Synergistic Effect between Glass Frit and Blast-Furnace Slag (107-M11) Laldji, S.; Phithaksounthone, A.; and Tagnit-Hamou, A., Jan.-Feb. 2010	75
—Time Evolution of Chloride Penetration in Blended Cement Concrete (107-M67) Villagrán-Zaccardi, Y. A.; Taus, V. L.; and Di Maio, Á. A., Nov.-Dec. 2010	593
Slawson, T. R. Ultra-High-Strength, Glass Fiber-Reinforced Concrete: Mechanical Behavior and Numerical Modeling (107-M23) Mar.-Apr. 2010	185
Slip hardening Interface Tailoring of Polyester-Type Fiber in Engineered Cementitious Composite Matrix against Pullout (107-M15) Rathod, J. D., and Patodi, S. C., Mar.-Apr. 2010	114
Slump Effects of Liquid Nitrogen Cooling on Fresh Concrete Properties (107-M16) Juenger, M. C. G.; Solt, S. M.; and Hema, J., Mar.-Apr. 2010	123
Snubbing coefficient Interface Tailoring of Polyester-Type Fiber in Engineered Cementitious Composite Matrix against Pullout (107-M15) Rathod, J. D., and Patodi, S. C., Mar.-Apr. 2010	114
Sodium carbonate Salt Weathering of Concrete by Sodium Carbonate and Sodium Chloride (107-M30) Haynes, H.; O'Neill, R.; Neff, M.; and Mehta, P. K., May-June 2010	258
Sodium chloride Salt Weathering of Concrete by Sodium Carbonate and Sodium Chloride (107-M30) Haynes, H.; O'Neill, R.; Neff, M.; and Mehta, P. K., May-June 2010	258
Soleymani, H. R. Precision of Compressive Strength Testing of Concrete with Different Cylinder Specimen Sizes (107-M52) Sept.-Oct. 2010	461
Solt, S. M. Effects of Liquid Nitrogen Cooling on Fresh Concrete Properties (107-M16) Mar.-Apr. 2010	123
Song, H.-W. Influence of Chemistry of Chloride Ions in Cement Matrix on Corrosion of Steel (107-M38) July-Aug. 2010	332
Soundness Potential Approach to Evaluating Soundness of Concrete Containing MgO-Based Expansive Agent (107-M13) Mo, L.; Deng, M.; and Tang, M., Mar.-Apr. 2010	99
Specimen Precision of Compressive Strength Testing of Concrete with Different Cylinder Specimen Sizes (107-M52) Taghaddos, H.; Soleymani, H. R.; and Robson, J. D., Sept.-Oct. 2010	461
Stability Performance of Cast-in-Place Self-Consolidating Concrete Made with Various Types of Viscosity-Enhancing Admixtures (107-M47) Khayat, K. H.; Hwang, S.-D.; and Belaid, K., July-Aug. 2010	403
Stabilization Design and Research on Gradient Structure Concrete Based on Volumetric Stabilization (107-M69) Wen, X.-D.; Ma, B.-G.; Gan, W.-Z.; and Xian, Z.-W., Nov.-Dec. 2010	611
Statistical mixture design Self-Consolidating High-Strength Concrete Optimization by Mixture Design Method (107-M41) Akalin, O.; Akay, K. U.; and Sennaroglu, B., July-Aug. 2010	357
Steam curing Effect of Aggregate Type on Mechanical Properties of Reactive Powder Concrete (107-M50) Aydin, S.; Yazici, H.; Yardimci, M. Y.; and Yigiter, H., Sept.-Oct. 2010	441
Steel fibers Influence of Fiber Type on Creep Deformation of Cracked Fiber-Reinforced Shotcrete Panels (107-M54) Bernard, E. S., Sept.-Oct. 2010	474
Stiffness	
—Assessing Mechanical Properties and Microstructure of Fire-Damaged Engineered Cementitious Composites (107-M35) Sahmaran, M.; Lachemi, M.; and Li, V. C., May-June 2010	297

—Modeling Mechanical Behavior of Reinforced Concrete due to Corrosion of Steel Bar (107-M14) Kim, K. H.; Jang, S. Y.; Jang, B. S.; and Oh, B. H., Mar.-Apr. 2010	106
Strain	
—Creep Behavior of High-Strength Concrete with Polypropylene Fibers at Elevated Temperatures (107-M22) Wu, B.; Lam, E. S.-S.; Liu, Q.; Chung, W. Y.-M.; and Ho, I. F.-Y., Mar.-Apr. 2010	176
—New Viscoelastic Model for Early-Age Concrete Based on Measured Strains and Stresses (107-M28) Choi, S. C., and Oh, B. H., May-June 2010	239
Strength	
—Comparison of Methods for Texture Assessment of Concrete Surfaces (107-M49) Santos, P. M. D., and Santos Júlio, E. N. B., Sept.-Oct. 2010	433
—Effect of Filtering on Texture Assessment of Concrete Surfaces (107-M05) Duarte Santos, P. M., and Santos Júlio, E. N. B., Jan.-Feb. 2010	31
—Effect of Mixture Compositions on Workability and Strength of Fly Ash-Based Inorganic Polymer Mortar (107-M62) Wu, H.-C., and Sun, P., Nov.-Dec. 2010	554
—Experimental Study on Mechanical Properties of Concrete Confined with Plastic Pipe (107-M17) Wang, J., and Yang, Q., Mar.-Apr. 2010	132
—Instantaneous In-Situ Determination of Water-Cement Ratio of Fresh Concrete (107-M66) Mancio, M.; Moore, J. R.; Brooks, Z.; Monteiro, P. J. M.; and Glaser, S. D., Nov.-Dec. 2010	586
Strength-Cementitious Material-Water Relationship for Proportioning of Fly Ash-Based Concrete (107-M39) Chowdhury, S., and Basu, P. C., July-Aug. 2010	340
Strength degradation Bidirectional Multiple Cracking Tests on High-Performance Fiber-Reinforced Cementitious Composite Plates (107-M51) Suryanto, B.; Nagai, K.; and Maekawa, K., Sept.-Oct. 2010	450
Strength ratio Strength-Cementitious Material-Water Relationship for Proportioning of Fly Ash-Based Concrete (107-M39) Chowdhury, S., and Basu, P. C., July-Aug. 2010	340
Stress New Viscoelastic Model for Early-Age Concrete Based on Measured Strains and Stresses (107-M28) Choi, S. C., and Oh, B. H., May-June 2010	239
Stress-strain curve Experimental Study on Mechanical Properties of Concrete Confined with Plastic Pipe (107-M17) Wang, J., and Yang, Q., Mar.-Apr. 2010	132
Structural breakdown Inclined Plane Test to Evaluate Structural Buildup at Rest of Self-Consolidating Concrete (107-M59) Khayat, K. H.; Omran, A. F.; and Pavate, T. V., Sept.-Oct. 2010	515
Structural buildup Inclined Plane Test to Evaluate Structural Buildup at Rest of Self-Consolidating Concrete (107-M59) Khayat, K. H.; Omran, A. F.; and Pavate, T. V., Sept.-Oct. 2010	515
Suitability of Various Measurement Techniques for Assessing Corrosion in Cracked Concrete (107-M55) Otieno, M. B.; Alexander, M. G.; and Beushausen, H. D., Sept.-Oct. 2010	481
Sulfate Effect of Calcium Chloride and Initial Curing Temperature on Expansion Caused by Sulfate Exposure (107-M72) Kosbab, B. D., and Kurtis, K. E., Nov.-Dec. 2010	632
Sumanasooriya, M. S. Planar Image-Based Reconstruction of Pervious Concrete Pore Structure and Permeability Prediction (107-M48) July-Aug. 2010	413
Sun, P. Effect of Mixture Compositions on Workability and Strength of Fly Ash-Based Inorganic Polymer Mortar (107-M62) Nov.-Dec. 2010	554
Sun, Z. Artificial Neural Network Modeling of Early-Age Dynamic Young's Modulus of Normal Concrete (107-M33) May-June 2010	282
Supplementary cementitious materials Analysis of Mortar Long-Term Strength with Supplementary Cementitious Materials Cured at Different Temperatures (107-M37) Ezziene, K.; Kadri, E.-H.; Bougara, A.; and Bennacer, R., July-Aug. 2010	323
Surface	
—Comparison of Methods for Texture Assessment of Concrete Surfaces (107-M49) Santos, P. M. D., and Santos Júlio, E. N. B., Sept.-Oct. 2010	433
—Effect of Filtering on Texture Assessment of Concrete Surfaces (107-M05) Duarte Santos, P. M., and Santos Júlio, E. N. B., Jan.-Feb. 2010	31
Surface chloride content Time Evolution of Chloride Penetration in Blended Cement Concrete (107-M67) Villagrán-Zaccardi, Y. A.; Taus, V. L.; and Di Maio, Á. A., Nov.-Dec. 2010	593

Surface-opening cracks Characterization of Deep Surface-Opening Cracks in Concrete: Feasibility of Impact-Generated Rayleigh-Waves (107-M36) Chai, H. K.; Momoki, S.; Aggelis, D. G.; and Shiotani, T., May-June 2010	305
Surface wave Numerical Simulation of Stress Waves on Surface of Strongly Heterogeneous Media (107-M53) Aggelis, D. G., Sept.-Oct. 2010	469
Suryanto, B. Bidirectional Multiple Cracking Tests on High-Performance Fiber-Reinforced Cementitious Composite Plates (107-M51) Sept.-Oct. 2010	450
Sustainability	
—Calcium Hydroxide Formation in Thin Cement Paste Exposed to Air (107-M42) Haselbach, L. M., and Liu, L., July-Aug. 2010	365
—Powder Additions to Mitigate Retardation in High-Volume Fly Ash Mixtures (107-M58) Bentz, D. P., Sept.-Oct. 2010	508
Synergistic Effect between Glass Frit and Blast-Furnace Slag (107-M11) Laldji, S.; Phithaksounthone, A.; and Tagnit-Hamou, A., Jan.-Feb. 2010	75

T

Taghaddos, H. Precision of Compressive Strength Testing of Concrete with Different Cylinder Specimen Sizes (107-M52) Sept.-Oct. 2010	461
Tagnit-Hamou, A. Synergistic Effect between Glass Frit and Blast-Furnace Slag (107-M11) Jan.-Feb. 2010	75
Tang, M.	
—Investigation of Alkali-Silica Reaction Inhibited by New Lithium Compound (107-M06) Jan.-Feb. 2010	37
—Potential Approach to Evaluating Soundness of Concrete Containing MgO-Based Expansive Agent (107-M13) Mar.-Apr. 2010	99
Taus, V. L. Time Evolution of Chloride Penetration in Blended Cement Concrete (107-M67) Nov.-Dec. 2010	593
Tavakkolizadeh, M. Environmental Effects on Mechanical Properties of Wet Lay-Up Fiber-Reinforced Polymer (107-M31) May-June 2010	267
Tejedor, M. I. Detection of Aggregate Clay Coatings and Impacts on Concrete (107-M45) July-Aug. 2010	387
Temperature	
—Analysis of Mortar Long-Term Strength with Supplementary Cementitious Materials Cured at Different Temperatures (107-M37) Ezziane, K.; Kadri, E.-H.; Bougara, A.; and Bennacer, R., July-Aug. 2010	323
—Compressive Strength Relationships for Concrete under Elevated Temperatures (107-M21) Knaack, A. M.; Kurama, Y. C.; and Kirkner, D. J., Mar.-Apr. 2010	164
—Creep Behavior of High-Strength Concrete with Polypropylene Fibers at Elevated Temperatures (107-M22) Wu, B.; Lam, E. S.-S.; Liu, Q.; Chung, W. Y.-M.; and Ho, I. F.-Y., Mar.-Apr. 2010	176
—Effects of Liquid Nitrogen Cooling on Fresh Concrete Properties (107-M16) Juenger, M. C. G.; Solt, S. M.; and Hema, J., Mar.-Apr. 2010	123
—Thermal Strain and Drying Shrinkage of Concrete Structures in the Field (107-M57) Choi, S., and Won, M. C., Sept.-Oct. 2010	498
Temperature stability Temperature Stability of Compressive Strength of Cement Asphalt Mortar (107-M04) Wang, F.; Liu, Z.; Wang, T.; and Hu, S., Jan.-Feb. 2010	27
Temperature Stability of Compressive Strength of Cement Asphalt Mortar (107-M04) Wang, F.; Liu, Z.; Wang, T.; and Hu, S., Jan.-Feb. 2010	27
Ternary Synergistic Effect between Glass Frit and Blast-Furnace Slag (107-M11) Laldji, S.; Phithaksounthone, A.; and Tagnit-Hamou, A., Jan.-Feb. 2010	75
Test Effect of Bottom Ash as Fine Aggregate on Shrinkage Cracking of Mortars (107-M08) Topçu, I. B., and Bilir, T., Jan.-Feb. 2010	48
Testing Influence of Fiber Type on Creep Deformation of Cracked Fiber-Reinforced Shotcrete Panels (107-M54) Bernard, E. S., Sept.-Oct. 2010	474
Texture	
—Comparison of Methods for Texture Assessment of Concrete Surfaces (107-M49) Santos, P. M. D., and Santos Júlio, E. N. B., Sept.-Oct. 2010	433
—Effect of Filtering on Texture Assessment of Concrete Surfaces (107-M05) Duarte Santos, P. M., and Santos Júlio, E. N. B., Jan.-Feb. 2010	31

Thermal strain Thermal Strain and Drying Shrinkage of Concrete Structures in the Field (107-M57) Choi, S., and Won, M. C., Sept.-Oct. 2010	498
Thermal Strain and Drying Shrinkage of Concrete Structures in the Field (107-M57) Choi, S., and Won, M. C., Sept.-Oct. 2010	498
Thin whitetopping pavements Effect of Different Dosages of Polypropylene Fibers in Thin Whitetopping Concrete Pavements (107-M07) Rodezno, M. C., and Kaloush, K. E., Jan.-Feb. 2010	42
Thixotropy Inclined Plane Test to Evaluate Structural Buildup at Rest of Self-Consolidating Concrete (107-M59) Khayat, K. H.; Omran, A. F.; and Pavate, T. V., Sept.-Oct. 2010	515
Three-dimensional reconstruction Planar Image-Based Reconstruction of Pervious Concrete Pore Structure and Permeability Prediction (107-M48) Sumanasooriya, M. S.; Bentz, D. P.; and Neithalath, N., July-Aug. 2010	413
Threshold value Influence of Chemistry of Chloride Ions in Cement Matrix on Corrosion of Steel (107-M38) Song, H.-W.; Jung, M.-S.; Lee, C.-H.; Kim, S.-H.; and Ann, K. Y., July-Aug. 2010	332
Tidal zone Models for Chloride Diffusion Coefficients of Concretes in Tidal Zone (107-M01) Bermúdez, M. A., and Alaejos, P., Jan.-Feb. 2010	3
Time Time Evolution of Chloride Penetration in Blended Cement Concrete (107-M67) Villagrán-Zaccardi, Y. A.; Taus, V. L.; and Di Maio, Á. A., Nov.-Dec. 2010	593
Time-dependent behavior Influence of Fiber Type on Creep Deformation of Cracked Fiber-Reinforced Shotcrete Panels (107-M54) Bernard, E. S., Sept.-Oct. 2010	474
Time Evolution of Chloride Penetration in Blended Cement Concrete (107-M67) Villagrán-Zaccardi, Y. A.; Taus, V. L.; and Di Maio, Á. A., Nov.-Dec. 2010	593
Time variation Corrosion Process of Steel Bar in Concrete in Full Lifetime (107-M63) Yuan, Y.; Jiang, J.; and Peng, T., Nov.-Dec. 2010	562
Tonyan, T. D. Ultra-High-Strength, Glass Fiber-Reinforced Concrete: Mechanical Behavior and Numerical Modeling (107-M23) Mar.-Apr. 2010	185
Topçu, I. B.	
—Effect of Bottom Ash as Fine Aggregate on Shrinkage Cracking of Mortars (107-M08) Jan.-Feb. 2010	48
—Effect of Non-Ground-Granulated Blast-Furnace Slag as Fine Aggregate on Shrinkage Cracking of Mortars (107-M61) Nov.-Dec. 2010	545
Toughness Polyvinyl Alcohol Fiber-Reinforced Mortars for Masonry Applications (107-M09) Skourup, B. N., and Erdogmus, E., Jan.-Feb. 2010	57
Triple Percolation in Concrete Reinforced with Carbon Fiber (107-M46) Baeza, F. J.; Chung, D. D. L.; Zornoza, E.; Andión, L. G.; and Garcés, P., July-Aug. 2010	396
Turkel, A. Size and Wall Effects on Compressive Strength of Concretes (107-M43) July-Aug. 2010	372

U

Ultra-high-strength concrete Ultra-High-Strength, Glass Fiber-Reinforced Concrete: Mechanical Behavior and Numerical Modeling (107-M23) Roth, M. J.; Eamon, C. D.; Slawson, T. R.; Tonyan, T. D.; and Dubey, A., Mar.-Apr. 2010	185
Ultra-High-Strength, Glass Fiber-Reinforced Concrete: Mechanical Behavior and Numerical Modeling (107-M23) Roth, M. J.; Eamon, C. D.; Slawson, T. R.; Tonyan, T. D.; and Dubey, A., Mar.-Apr. 2010	185
Ultrasonic Inspection of Concrete Using Air-Coupled Ultrasonic Pulse Velocity (107-M20) Cetrangolo, G. P., and Popovics, J. S., Mar.-Apr. 2010	155
Ultrasonic testing Wavelet Analysis of Ultrasonic Pulses in Cement-Based Materials (107-M29) Nogueira, C. L., May-June 2010	248
Uniformity coefficient Effect of Aggregate Size and Gradation on Pervious Concrete Mixtures (107-M71) Neptune, A. I., and Putman, B. J., Nov.-Dec. 2010	625

V

Velocity Numerical Simulation of Stress Waves on Surface of Strongly Heterogeneous Media (107-M53) Aggelis, D. G., Sept.-Oct. 2010	469
Venkatachalapathy, V. Influence of Mixing Sequence on Cement-Admixture Interaction (Disc. 106-M55) Sept.-Oct. 2010	532

Venkiteela, G. Artificial Neural Network Modeling of Early-Age Dynamic Young's Modulus of Normal Concrete (107-M33) May-June 2010 . . .	282
Villagrán-Zaccardi, Y. A. Time Evolution of Chloride Penetration in Blended Cement Concrete (107-M67) Nov.-Dec. 2010	593
Viscoelastic New Viscoelastic Model for Early-Age Concrete Based on Measured Strains and Stresses (107-M28) Choi, S. C., and Oh, B. H., May-June 2010	239
Viscosity Inclined Plane Test to Evaluate Structural Buildup at Rest of Self-Consolidating Concrete (107-M59) Khayat, K. H.; Omran, A. F.; and Pavate, T. V., Sept.-Oct. 2010	515
Viscosity-enhancing admixture Performance of Cast-in-Place Self-Consolidating Concrete Made with Various Types of Viscosity-Enhancing Admixtures (107-M47) Khayat, K. H.; Hwang, S.-D.; and Belaid, K., July-Aug. 2010	403

W

Wall effect Size and Wall Effects on Compressive Strength of Concretes (107-M43) Turkel, A., and Ozkul, M. H., July-Aug. 2010	372
Wang, F. Temperature Stability of Compressive Strength of Cement Asphalt Mortar (107-M04) Jan.-Feb. 2010	27
Wang, H. Expansion of MgO in Cement Pastes Measured by Different Methods (Disc. 107-M12) Nov.-Dec. 2010	640
Wang, J. Experimental Study on Mechanical Properties of Concrete Confined with Plastic Pipe (107-M17) Mar.-Apr. 2010	132
Wang, K. Investigation into Yield Behavior of Fresh Cement Paste: Model and Experiment (107-M02) Jan.-Feb. 2010	12
Wang, T. Temperature Stability of Compressive Strength of Cement Asphalt Mortar (107-M04) Jan.-Feb. 2010	27
Water-cement ratio Instantaneous In-Situ Determination of Water-Cement Ratio of Fresh Concrete (107-M66) Mancio, M.; Moore, J. R.; Brooks, Z.; Monteiro, P. J. M.; and Glaser, S. D., Nov.-Dec. 2010 . . .	586
Water-cementitious material ratio Strength-Cementitious Material-Water Relationship for Proportioning of Fly Ash-Based Concrete (107-M39) Chowdhury, S., and Basu, P. C., July-Aug. 2010	340
Wavelet Analysis of Ultrasonic Pulses in Cement-Based Materials (107-M29) Nogueira, C. L., May-June 2010	248
Wavelets Wavelet Analysis of Ultrasonic Pulses in Cement-Based Materials (107-M29) Nogueira, C. L., May-June 2010	248
Wen, X.-D. Design and Research on Gradient Structure Concrete Based on Volumetric Stabilization (107-M69) Nov.-Dec. 2010	611
Wet lay-up technique Environmental Effects on Mechanical Properties of Wet Lay-Up Fiber-Reinforced Polymer (107-M31) Saadatmanesh, H.; Tavakkolizadeh, M.; and Mostofinejad, D., May-June 2010	267

Won, M. C. Thermal Strain and Drying Shrinkage of Concrete Structures in the Field (107-M57) Sept.-Oct. 2010	498
Workability Performance of Cast-in-Place Self-Consolidating Concrete Made with Various Types of Viscosity-Enhancing Admixtures (107-M47) Khayat, K. H.; Hwang, S.-D.; and Belaid, K., July-Aug. 2010	403
Wu, B. Creep Behavior of High-Strength Concrete with Polypropylene Fibers at Elevated Temperatures (107-M22) Mar.-Apr. 2010	176
Wu, H.-C. Effect of Mixture Compositions on Workability and Strength of Fly Ash-Based Inorganic Polymer Mortar (107-M62) Nov.-Dec. 2010	554

X

Xian, Z.-W. Design and Research on Gradient Structure Concrete Based on Volumetric Stabilization (107-M69) Nov.-Dec. 2010	611
--	-----

Y

Yang, Q. Experimental Study on Mechanical Properties of Concrete Confined with Plastic Pipe (107-M17) Mar.-Apr. 2010	132
Yardimci, M. Y. Effect of Aggregate Type on Mechanical Properties of Reactive Powder Concrete (107-M50) Sept.-Oct. 2010	441
Yazici, H. Effect of Aggregate Type on Mechanical Properties of Reactive Powder Concrete (107-M50) Sept.-Oct. 2010	441
Yehia, S. Conductive Concrete for Cathodic Protection of Bridge Decks (107-M65) Nov.-Dec. 2010	577
Yield stress	
—Inclined Plane Test to Evaluate Structural Buildup at Rest of Self-Consolidating Concrete (107-M59) Khayat, K. H.; Omran, A. F.; and Pavate, T. V., Sept.-Oct. 2010	515
—Investigation into Yield Behavior of Fresh Cement Paste: Model and Experiment (107-M02) Lu, G., and Wang, K., Jan.-Feb. 2010	12
Yigiter, H. Effect of Aggregate Type on Mechanical Properties of Reactive Powder Concrete (107-M50) Sept.-Oct. 2010	441
Yu, C. Investigation of Alkali-Silica Reaction Inhibited by New Lithium Compound (107-M06) Jan.-Feb. 2010	37
Yuan, Y. Corrosion Process of Steel Bar in Concrete in Full Lifetime (107-M63) Nov.-Dec. 2010	562

Z

Zhang, Y. Investigation of Alkali-Silica Reaction Inhibited by New Lithium Compound (107-M06) Jan.-Feb. 2010	37
Zornoza, E. Triple Percolation in Concrete Reinforced with Carbon Fiber (107-M46) July-Aug. 2010	396